

=> fil reg

FILE 'REGISTRY' ENTERED AT 10:19:11 ON 27 JAN 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 25 JAN 2006 HIGHEST RN 872674-04-9
DICTIONARY FILE UPDATES: 25 JAN 2006 HIGHEST RN 872674-04-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> d l68 ide can tot

L68 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN
RN 121250-47-3 REGISTRY
ED Entered STN: 23 Jun 1989
CN Octadecadienoic acid (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 9,11(or 10,12)-Octadecadienoic acid
CN Conjugated linoleic acid
DR 342889-37-6
MF C18 H32 O2
CI IDS, COM
SR US Environmental Protection Agency (US EPA)
LC STN Files: ADISNEWS, AGRICOLA, BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS,
CHEMLIST, CIN, PIRA, PROMT, TOXCENTER, USPAT2, USPATFULL
Other Sources: DSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

CM 1

CRN 57-11-4
CMF C18 H36 O2

HO₂C- (CH₂)₁₆-Me

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

964 REFERENCES IN FILE CA (1907 TO DATE)
39 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
975 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:68736

REFERENCE 2: 144:64022

REFERENCE 3: 144:35803

REFERENCE 4: 144:35487

REFERENCE 5: 144:35479

REFERENCE 6: 144:35356

REFERENCE 7: 144:34285

REFERENCE 8: 144:5986

REFERENCE 9: 144:5962

REFERENCE 10: 144:2884

L68 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN

RN 2540-56-9 REGISTRY

ED Entered STN: 16 Nov 1984

CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 9,11-Octadecadienoic acid, (E,Z)- (8CI)

OTHER NAMES:

CN 9-cis,11-trans-Linoleic acid

CN 9-cis,11-trans-Octadecadienoic acid

CN 9Z,11E-Octadecadienoic acid

CN Bovinic acid

CN cis-9,trans-11 Conjugated linoleic acid

CN cis-9,trans-11-Octadecadienoic acid

CN Rumenic acid

CN trans-11-cis-9-Octadecadienoic acid

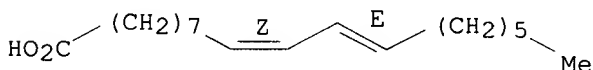
FS STEREOSEARCH

MF C18 H32 O2

CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS,
CASREACT, CHEMCATS, CSCHEM, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

Double bond geometry as shown.



****PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT****

818 REFERENCES IN FILE CA (1907 TO DATE)
17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
833 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 144:66139

REFERENCE 2: 144:35808

REFERENCE 3: 144:35803

REFERENCE 4: 144:35786

REFERENCE 5: 144:35781

REFERENCE 6: 144:35479

REFERENCE 7: 144:35412

REFERENCE 8: 144:35396

REFERENCE 9: 144:22207

REFERENCE 10: 144:5984

L68 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN

RN 2420-56-6 REGISTRY

ED Entered STN: 16 Nov 1984

CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 10,12-Octadecadienoic acid, (Z,E)-

OTHER NAMES:

CN 10-trans,12-cis-Linoleic acid

CN 10-trans-12-cis-Octadecadienoic acid

CN 10E,12Z-Octadecadienoic acid

CN trans-10,cis-12 Conjugated linoleic acid

CN trans-10-cis-12-Octadecadienoic acid

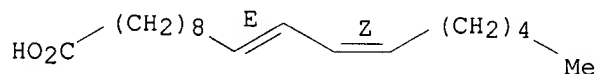
FS STEREOSEARCH

MF C18 H32 O2

CI COM

LC STN Files: ANABSTR, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT,
CHEMCATS, CSCHM, RTECS*, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

Double bond geometry as shown.

****PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT****

567 REFERENCES IN FILE CA (1907 TO DATE)
14 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

579 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 144:66139
REFERENCE 2: 144:35792
REFERENCE 3: 144:35786
REFERENCE 4: 144:35781
REFERENCE 5: 144:35479
REFERENCE 6: 144:22207
REFERENCE 7: 144:5984
REFERENCE 8: 144:5976
REFERENCE 9: 144:5962
REFERENCE 10: 143:476868

L68 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN

RN **1839-11-8** REGISTRY

ED Entered STN: 16 Nov 1984

CN **9,11-Octadecadienoic acid (6CI, 8CI, 9CI)** (CA INDEX NAME)

OTHER NAMES:

CN **Δ 9,11-Octadecadienoic acid**

CN **9,11-Linoleic acid**

CN CLA 80

CN **Conjugated linoleic acid**

CN Nouracid DE 554

CN NSC 7886

CN Ricineic acid

CN Ricinenic acid

CN Selin CLA

FS 3D CONCORD

MF **C18 H32 O2**

CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, PIRA, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

Other Sources: NDSL**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

$\text{HO}_2\text{C}-(\text{CH}_2)_7-\text{CH}=\text{CH}-\text{CH}=\text{CH}-(\text{CH}_2)_5-\text{Me}$

****PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT****

409 REFERENCES IN FILE CA (1907 TO DATE)

44 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

410 REFERENCES IN FILE CAPLUS (1907 TO DATE)

14 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 144:53375

REFERENCE 2: 144:35465
REFERENCE 3: 144:32217
REFERENCE 4: 144:8162
REFERENCE 5: 143:458575
REFERENCE 6: 143:437909
REFERENCE 7: 143:432179
REFERENCE 8: 143:399461
REFERENCE 9: 143:385719
REFERENCE 10: 143:385373

L68 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN

RN 60-33-3 REGISTRY

ED Entered STN: 16 Nov 1984

CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 9,12-Octadecadienoic acid (Z,Z)-

CN Linoleic acid (8CI)

OTHER NAMES:

CN (9Z,12Z)-9,12-Octadecadienoic acid

CN (Z,Z)-9,12-Octadecadienoic acid

CN α -Linoleic acid

CN 9,12-Octadecadienoic acid, (Z,Z)-

CN 9-cis,12-cis-Linoleic acid

CN 9Z,12Z-Linoleic acid

CN 9Z,12Z-Octadecadienoic acid

CN all-cis-9,12-Octadecadienoic acid

CN cis,cis-Linoleic acid

CN cis- Δ^9 ,12-Octadecadienoic acid

CN cis-9,cis-12-Octadecadienoic acid

CN Emersol 315

CN Extra Linoleic 90

CN Linolic acid

CN Polylin 515

CN Unifac 6550

FS STEREOSEARCH

MF C18 H32 O2

CI COM

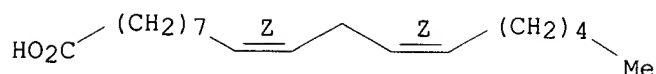
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PATDPASPC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, USPAT2, USPATFULL, VETU

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

34810 REFERENCES IN FILE CA (1907 TO DATE)
1442 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
34902 REFERENCES IN FILE CAPLUS (1907 TO DATE)
10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 144:74824
REFERENCE 2: 144:74453
REFERENCE 3: 144:71311
REFERENCE 4: 144:71251
REFERENCE 5: 144:71200
REFERENCE 6: 144:69193
REFERENCE 7: 144:69191
REFERENCE 8: 144:69188
REFERENCE 9: 144:69186
REFERENCE 10: 144:68986

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 10:19:20 ON 27 JAN 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 27 Jan 2006 VOL 144 ISS 6
FILE LAST UPDATED: 26 Jan 2006 (20060126/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> => d all hitstr tot 166

- L66 ANSWER 1 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:1228177 HCAPLUS
ED Entered STN: 21 Nov 2005
TI Calcium plus linoleic acid therapy for pregnancy-induced **hypertension**
AU Herrera, J. A.; Shahabuddin, A. K. M.; Ersheng, G.; Wei, Yuan; Garcia, R. G.; Lopez-Jaramillo, P.
CS Department of Family Medicine, School of Medicine, Universidad del Valle, Cali, Colombia
SO International Journal of Gynecology & Obstetrics (2005), 91(3), 221-227
CODEN: IJGOAL; ISSN: 0020-7292
PB Elsevier Ireland Ltd.
DT Journal
LA English
CC 1 (Pharmacology)
AB Objective: To determine the effect of dietary supplementation of calcium plus **conjugated linoleic acid** (calcium-**CLA**) in reducing the incidence of vascular endothelial dysfunction in pregnant women at high risk of developing pregnancy-induced **hypertension** (PIH). Patients and methods: This randomized, double-blind, placebo-controlled trial conducted at 4 outpatient clinics in 2 developing countries recruited 48 healthy primigravidas younger than 19 years or older than 35 years who had a family history of pre-eclampsia and diastolic notch. Twenty-four participants received daily elemental calcium (600 mg) plus **CLA** (450 mg) and 24 received placebo from week 18 to 22 of pregnancy until delivery. Results: Calcium-**CLA** supplementation reduced significantly the incidence of PIH (2 cases [8%] in the study group vs. 10 cases [42%] in the placebo group; relative risk, 0.20; 95% confidence interval, 0.05-0.82; P = .01). Endothelial dysfunction was also significantly reduced after calcium-**CLA** supplementation (in 18 women [75%] vs. 4 women [17%]; P < .001), compared with the placebo group (in 15 [63%] vs. 9 women [38%]; P = .08). Conclusion: In pregnant women at high risk for PIH, calcium-**CLA** supplementation decreases the incidence of PIH and improves endothelial function.
- L66 ANSWER 2 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:1108325 HCAPLUS
DN 144:5895
ED Entered STN: 17 Oct 2005
TI Conjugated fatty acids in food and their health benefits
AU Nagao, Koji; Yanagita, Teruyoshi
CS Laboratory of Nutrition Biochemistry, Department of Applied Biological Sciences, Saga University, 1 Honjo, Saga, 840-8502, Japan
SO Journal of Bioscience and Bioengineering (2005), 100(2), 152-157
CODEN: JBBIF6; ISSN: 1389-1723
PB Society for Biotechnology, Japan
DT Journal; General Review
LA English
CC 18-0 (Animal Nutrition)
Section cross-reference(s): 14
AB A review. Conjugated fatty acids (CFAs) are a mixture of positional and geometric isomers of polyunsatd. fatty acids with conjugated double bonds. Reports indicate that CFAs have potent beneficial effects, including antitumor, antiobese, antiatherogenic and antidiabetic activities. The mols. have also been shown to prevent the onset of **hypertension**. Recent reports suggest that each CFA isomer has different functions, for example the 10trans, 12cis isomer of **conjugated linoleic**

acid (CLA) has anticarcinogenic, antiobese and antidiabetic effects, whereas the 9cis, 11trans-**CLA** isomer exerts an anticancer effect. Although it would be interesting to know the effects of CFAs on humans, there are only few reports concerning the anticancer and antiobese effects of **CLA** in humans. More detailed evaluations of the physiol. bioactivities of CFA isomers on lifestyle-related diseases in humans and animals will be of great interest in future studies.

ST review conjugated fatty acid nutrition health

IT Antiobesity agents

Antitumor agents

Health

Human

Hypolipemic agents

Nutrition, animal

(conjugated fatty acids in food and their health benefits)

IT Fatty acids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(conjugated; conjugated fatty acids in food and their health benefits)

RE.CNT 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Arao, K; Biosci Biotechnol Biochem 2004, V68, P2643 HCAPLUS
- (2) Arao, K; Lipids Health Dis 2004, V3, P24
- (3) Aro, A; Nutr Cancer 2000, V38, P151 HCAPLUS
- (4) Azain, M; J Nutr 2000, V130, P1548 HCAPLUS
- (5) Beruly, M; Annu Rev Nutr 2002, V22, P505
- (6) Beruly, M; J Nutr 2002, V132, P2995
- (7) Blankson, H; J Nutr 2000, V130, P2943 HCAPLUS
- (8) Burgess, J; Lipids 1991, V26, P162 HCAPLUS
- (9) Chin, S; J Food Comp Anal 1992, V5, P185 HCAPLUS
- (10) Chujo, H; Cancer Lett 2003, V202, P81 HCAPLUS
- (11) DeLany, J; J Am Coll Nutr 2000, V19, P487S HCAPLUS
- (12) Doll, R; Cancer Res 1992, V52, P2024S MEDLINE
- (13) Dugan, M; Am J Clin Nutr 2004, V79, P1212S HCAPLUS
- (14) Fernandez, E; Am J Clin Nutr 1999, V70, P85 HCAPLUS
- (15) Fremann, D; Public Health Nutr 2002, V5, P73
- (16) Fritsche, J; Z Lebensm Unters Forsch A 1998, V206, P77 HCAPLUS
- (17) Ha, Y; Carcinogenesis 1987, V8, P1881 HCAPLUS
- (18) Holman, R; Proc Soc Exp Biol Med 1951, V76, P100 HCAPLUS
- (19) Holub, D; Mol Cell Biochem 2004, V263, P217 HCAPLUS
- (20) Houseknecht, K; Biochem Biophys Res Commun 1998, V244, P678 HCAPLUS
- (21) Igarashi, M; Biochem Biophys Res Commun 2000, V270, P649 HCAPLUS
- (22) Igarashi, M; Cancer Lett 2000, V148, P173 HCAPLUS
- (23) Inoue, N; Biochem Biophys Res Commun 2004, V323, P679 HCAPLUS
- (24) Ip, C; Cancer Res 1991, V51, P6118 HCAPLUS
- (25) Ip, C; Cancer Res 1994, V54, P1212 HCAPLUS
- (26) Jiang, J; Am J Clin Nutr 1999, V70, P21 HCAPLUS
- (27) Kepler, C; J Biol Chem 1966, V25, P1350
- (28) Kishino, S; Biosci Biotechnol Biochem 2002, V66, P2283 HCAPLUS
- (29) Kishino, S; Biosci Biotechnol Biochem 2003, V67, P179 HCAPLUS
- (30) Knekt, P; Br J Cancer 1996, V73, P687 MEDLINE
- (31) Koba, K; Lipids 2002, V37, P343 HCAPLUS
- (32) Kohno, H; Jpn J Cancer Res 2002, V93, P133 HCAPLUS
- (33) Kris-Etherton, P; Nutr Rev 2004, V62, P414
- (34) Lavillonniere, F; Advances in conjugated linoleic acid research 1999, V1, P276 HCAPLUS
- (35) Lee, J; J Nutr Sci Vitaminol 2002, V48, P142 HCAPLUS
- (36) Lee, K; Atherosclerosis 1994, V108, P19 HCAPLUS
- (37) Lopez, A; J Agardh Lipids 1987, V22, P190 HCAPLUS
- (38) McNeill, G; J Am Oil Chem Soc 1999, V76, P1265 HCAPLUS

- (39) Mikhailoba, M; Lipids 1995, V30, P583
- (40) Nagao, K; Biochem Biophys Res Commun 2003, V306, P134 HCAPLUS
- (41) Nagao, K; Biochem Biophys Res Commun 2003, V310, P562 HCAPLUS
- (42) Nagao, K; Nutrition 2003, V19, P652 HCAPLUS
- (43) Nagao, T; Biosci Biotechnol Biochem 2003, V67, P1429 HCAPLUS
- (44) Nagao, T; J Am Oil Chem Soc 2002, V79, P303 HCAPLUS
- (45) Nicolosi, R; Artery 1997, V22, P266 HCAPLUS
- (46) Pariza, M; Carcinogenesis 1985, V6, P591 HCAPLUS
- (47) Pariza, M; Proc Soc Exp Biol Med 2000, V230, P8
- (48) Pariza, M; Prog Lipid Res 2001, V40, P283 HCAPLUS
- (49) Park, Y; Lipids 1997, V32, P853 HCAPLUS
- (50) Parodi, P; Aust J Dairy Technol 1994, V49, P93 HCAPLUS
- (51) Rahman, S; Food Res Int 2001, V34, P515 HCAPLUS
- (52) Rahman, S; Nutrition 2001, V17, P385 HCAPLUS
- (53) Rainer, L; J Am Diet Assoc 2004, V104, P963 HCAPLUS
- (54) Reaney, M; Inform 2002, V13, P802
- (55) Ritzenthaler, K; J Nutr 2001, V131, P1548 HCAPLUS
- (56) Ryder, J; Diabetes 2001, V50, P1149 HCAPLUS
- (57) Sakono, M; J Nutr Sci Vitaminol 2002, V48, P405 HCAPLUS
- (58) Schonberg, S; Anticancer Res 1995, V15, P1241 MEDLINE
- (59) Sehat, N; Lipids 1998, V33, P217 HCAPLUS
- (60) Shultz, T; Cancer Lett 1992, V63, P125 HCAPLUS
- (61) Sugano, M; Biosci Biotechnol Biochem 2001, V65, P2535 HCAPLUS
- (62) Sugano, M; Lipids 1998, V33, P521 HCAPLUS
- (63) Suzuki, R; Lipids 2001, V36, P477 HCAPLUS
- (64) Thom, E; J Int Med Res 2001, V29, P392 HCAPLUS
- (65) Vessby, B; Curr Opin Lipidol 2003, V14, P15 HCAPLUS
- (66) Wang, Y; J Oleo Sci 2003, V52, P121 HCAPLUS
- (67) Wang, Y; J Oleo Sci 2003, V52, P129 HCAPLUS
- (68) Yamasaki, M; Biosci Biotechnol Biochem 2000, V64, P2159 HCAPLUS
- (69) Yamasaki, M; Cancer Lett 2002, V188, P171 HCAPLUS
- (70) Yanagita, T; Essential fatty acids and eicosanoids 2003, P348 HCAPLUS
- (71) Yotsumoto, H; Food Res Int 1999, V31, P403

L66 ANSWER 3 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:812384 HCAPLUS

DN 143:171441

ED Entered STN: 18 Aug 2005

TI Functional foods: Salient features and clinical applications

AU Riezzo, Giuseppe; Chiloiro, Marisa; Russo, Francesco

CS Laboratory of Experimental Pathophysiology, Scientific Institute for Digestive Diseases "S. De Bellis", Castellana Grotte, Italy

SO Current Drug Targets: Immune, Endocrine and Metabolic Disorders (2005), 5(3), 331-337

CODEN: CDTIBT; ISSN: 1568-0088

PB Bentham Science Publishers Ltd.

DT Journal; General Review

LA English

CC 17-0 (Food and Feed Chemistry)

Section cross-reference(s): 1, 18

AB A review. The term "functional food" refers to foods or ingredients of food providing an addnl. physiolo. benefit beyond their basic nutritional needs. Health benefits are best obtained through a varied diet containing fruits, vegetables, grains, legumes, and seeds. However, fortified foods and dietary supplements were marketed and food industry have made functional food one of their current leading trends. Recently, the number of functional foods that have a potential benefit on health has hugely grown and scientific evidence is supporting the role of functional foods in prevention and treatment of several diseases. Cancer, diabetes, heart disease and **hypertension** are the most important diseases that

can be treated or prevented by functional foods; other diseases are osteoporosis, abnormal bowel motility, and arthritis. It was estimated that 80% of cancer in USA have a nutrition/diet component suggesting a great impact of functional food and foods components on incidence and treatment of cancer. Numerous factors complicate the evaluation of scientific evidence such as the complexity of food substance, effect on food, metabolic changes associated to dietary changes, the lack of biol. markers of disease development. This paper reviews the scientific evidence supporting this area regarding only those foods and ingredients in which a clear exptl. and clin. evidence exists for their chemopreventive and therapeutic effects.

ST review functional food animal nutrition disease therapy

IT Nutrients

(antinutrients; health benefits of functional foods and clin. applications)

IT Antiarthritics

Antidiabetic agents

Antihypertensives

Antitumor agents

Cereal (grain)

Dietary fiber

Fabaceae

Fruit

Health food

Human

Nutrition, animal

Vegetable

(health benefits of functional foods and clin. applications)

IT Carotenes, biological studies

Flavonoids

Phytoestrogens

Vitamins

RL: BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(health benefits of functional foods and clin. applications)

IT Antioxidants

(natural; health benefits of functional foods and clin. applications)

IT Phenols, biological studies

RL: BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polyphenols, nonpolymeric; health benefits of functional foods and clin. applications)

IT Fatty acids, biological studies

RL: BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polyunsatd., n-3; health benefits of functional foods and clin. applications)

IT **60-33-3D, Linoleic acid, conjugated**

RL: BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(health benefits of functional foods and clin. applications)

RE.CNT 74 THERE ARE 74 CITED REFERENCES AVAILABLE FOR THIS RECORD

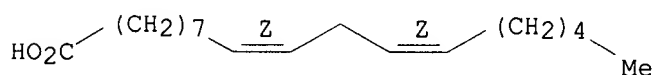
RE

- (1) Adlercreutz, C; J Nutr 1995, V125(3 suppl), P757S MEDLINE
- (2) Ahmed, N; Anticancer Res 2001, V21(5), P3519 HCAPLUS
- (3) Albanes, D; J Natl Cancer Inst 1996, V88(21), P1560 HCAPLUS
- (4) Alberts, D; N Engl J Med 2000, V342(16), P1156 MEDLINE
- (5) Amati, L; Curr Pharm Des 2003, V9(24), P1924 HCAPLUS
- (6) Andoh, A; Cancer Immunol Immunother 2002, V50(12), P663 HCAPLUS
- (7) Anon; Grant from Ministero della Salute. Evaluation of toxic components and

- study of functional food in vitro and in vivo Code 2002/132
- (8) Anon; http://cancer.org/eprise/main/docroot/ETO/content/ETO_5_3X_Broccoli?si-tearea=&viewmode= print
 - (9) Basiak, J; Chem Biol Interact 2002, V140(1), P1
 - (10) Beer, T; Semin Oncol 2001, V28(4 suppl 15), P49 MEDLINE
 - (11) Bell, S; Crit Rev Food Sci Nutr 2002, V42(2), P163
 - (12) Bernardi, R; Endocrinology 2002, V143(7), P2508 HCAPLUS
 - (13) Bonithon-Kopp, C; Lancet 2000, V356(9238), P1300 HCAPLUS
 - (14) Bottone, F; J Nutr 2002, V132(4), P773 HCAPLUS
 - (15) Brown, A; Am J Kidney Dis V38(5 suppl), PS3
 - (16) Brown, L; Am J Clin Nutr 1999, V69(1), P30 HCAPLUS
 - (17) Buddington, R; Annu Rev Physiol 1989, V51, P601 HCAPLUS
 - (18) Chiloire, M; Inter J Obesity 1999, V23(12), P1
 - (19) Chinni, S; Oncogene 2001, V20(23), P2927 HCAPLUS
 - (20) Colston, K; Endocr Relat Cancer V9(1), P45 HCAPLUS
 - (21) Eicholzer, M; Swiss Med Wkly 2001, V131(37-38), P539
 - (22) Emenaker, N; J Nutr 2001, V131(11 suppl), P3041S MEDLINE
 - (23) Evans, T; Br J Cancer 2002, V86(5), P680 HCAPLUS
 - (24) Fleischauer, A; Am J Clin Nutr 2000, V72(4), P1047 HCAPLUS
 - (25) Frantz, D; Nutr Cancer 2000, V38(2), P255 HCAPLUS
 - (26) Gallo, D; Breast Cancer Res Treat 2001, V69(2), P153 HCAPLUS
 - (27) Gao, C; Jpn J Cancer Res 1999, V90(6), P614 HCAPLUS
 - (28) Guilloteau, P; Biol Neonate 1992, V61(2), P103 HCAPLUS
 - (29) Hasler, C; <http://www.nutwatch.org/04Foods/ff.html>
 - (30) Hecht, S; J Cell Biochem Suppl 1996, V22(1), P195
 - (31) Holt, P; FEBS Lett 1991, V287(10), P102
 - (32) Huang, S; Anticancer Res 2000, V22(2A), P799
 - (33) Ju, Y; Cancer Res 2002, V62(9), P2474 HCAPLUS
 - (34) La Vecchia, C; Eur J Nutr 2001, V40(6), P261 HCAPLUS
 - (35) Lamm, D; J Nutr 2001, V131(3), P1067S
 - (36) Leong, H; Carcinogenesis 2001, V22(11), P1809 HCAPLUS
 - (37) Levi, F; Eur J Cancer 2001, V37(16), P2091 MEDLINE
 - (38) Li, Y; Oncogene 1999, V18(20), P3166 HCAPLUS
 - (39) Macrae, F; Am J Med 1999, V106(1A), P38S HCAPLUS
 - (40) Malila, N; Eur J Clin Nutr 2002, V56(7), P615 HCAPLUS
 - (41) Meng, Q; Cancer Res Treat 2000, V63(2), P147 HCAPLUS
 - (42) Messina, M; J Am Diet Assoc 1991, V91(7), P836 MEDLINE
 - (43) Messina, M; J Nutr 2001, V131(11 suppl), P3095S MEDLINE
 - (44) Messina, M; J Nutr 2002, V132(3 suppl), P547S
 - (45) Messina, M; Nutr Cancer 1994, V21(2), P113 HCAPLUS
 - (46) Metha, R; J Nutr Biochem 2002, V13(5), P252
 - (47) Michnovicz, J; Nutr Cancer 1991, V16(1), P59 HCAPLUS
 - (48) Milner, J; Adv Exp Med Biol 2001, V49(2), P69
 - (49) Murrill, W; Carcinogenesis 1996, V17(7), P1451 HCAPLUS
 - (50) Nakagawa, H; Carcinogenesis 2001, V22(6), P891 HCAPLUS
 - (51) National Cancer Institute; [Http://researchportfolio.cancer.gov/cgi-bin/abstract.pl?Category=3&Search=phytochemicals](http://researchportfolio.cancer.gov/cgi-bin/abstract.pl?Category=3&Search=phytochemicals)
 - (52) Palozza, P; Free Radic Biol Med 1997, V22(6), P1065 HCAPLUS
 - (53) Parisi, G; Dig Dis Sci 2002, V47(8), P1967
 - (54) Rahman, K; J Steroid Biochem Mol Biol 2002, V80(2), P191 HCAPLUS
 - (55) Recchia, F; Clin Ther 1995, V146(10), P603 MEDLINE
 - (56) Ren, M; Eur J Nutr 2001, V40(4), P135 HCAPLUS
 - (57) Riezzo, G; J Gastroenterol 2003, V38(9), P836
 - (58) Saunier, K; Dig Liver Dis 2002, V34(2), PS19
 - (59) Scholz-Ahrens, K; Am J Clin Nutr 2001, V73(21 suppl), P459S
 - (60) Shrubsole, M; Cancer Res 2001, V61(19), P7136 HCAPLUS
 - (61) Song, K; J Nutr 1999, V129(3), P657 HCAPLUS
 - (62) Srivastava, K; S Afr J Sci 1995, V91(1), P68
 - (63) Thomson, A; Can J Physiol Pharmacol 1986, V64(1), P30 HCAPLUS
 - (64) Thurl, S; Annal Biochem 1996, V235(2), P202 HCAPLUS

- (65) Tomomasa, T; Pediatrics 1987, V80(3), P434 MEDLINE
 (66) Van Schacky, C; Ann Intern Med 1999, V130(7), P554
 (67) van den Bemd, G; Curr Drug Target 2002, V3(1), P85 HCAPLUS
 (68) Verhoeven, T; Cancer Epidemiol Biomarkers Pre 1996, V5(9), P733
 (69) Verhoeven, T; Chem Bio Interactions 1997, V103(2), P79
 (70) Wang, X; J Natl Cancer Inst 1999, V91(1), P60 HCAPLUS
 (71) Woodson, K; Anticancer Res 2000, V22(1A), P375
 (72) Yong, L; Am J Epidemiol 1997, V146(3), P231 MEDLINE
 (73) You, W; Eur J Cancer Prev 2001, V10(3), P257 MEDLINE
 (74) Zhou, J; J Nutr 1999, V129(9), P1628 HCAPLUS
 IT **60-33-3D, Linoleic acid, conjugated**
 RL: BSU (Biological study, unclassified); FFD (Food or feed use); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (health benefits of functional foods and clin. applications)
 RN 60-33-3 HCAPLUS
 CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



- L66 ANSWER 4 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN **2005:663398** HCAPLUS
 DN 143:114166
 ED Entered STN: 28 Jul 2005
 TI "Cheese - a valuable food in human nutrition"
 AU Sieber, Robert
 CS Agroscope Liebefeld-Posieux, Eidgenoessische Forschungsanstalt fuer
 Nutztiere und Milchwirtschaft (ALP), Bern, Switz.
 SO Mitteilungen aus Lebensmitteluntersuchung und Hygiene (2005), 96(2),
 141-170
 CODEN: MLHYFH; ISSN: 1424-1307
 PB Bundesamt fuer Gesundheit
 DT Journal; General Review
 LA German
 CC 17-0 (Food and Feed Chemistry)
 AB A review. Cheese consists mainly of protein, fat and water. It also
 contains vitamins, minerals and trace elements. There is practically no
 lactose, which is broken down during cheese ripening. Cheese helps to
 supply most of the essential amino acids we require through the amino
 acids contained in its proteins. Bioactive peptides also occur during
 cheese ripening. **Conjugated linoleic acids**
 and sphingolipids with their different physiol. effects are discussed as
 constituents of cheese fat. Moreover, cheese is a rich source of vitamins
 B2, B12 and calcium with up to 1 g/100 g cheese. Consumption of cheese
 and milk is extremely important for a sufficient supply of this mineral.
 In order to prevent osteoporosis occurring in later life, sufficient
 calcium must be supplied during the first thirty years to build up peak
 bone mass. Furthermore, the calcium in milk products can lower the risk
 of **high blood pressure** and reduce the body
 weight of overweight people. Cheese can also help to prevent dental caries
 and has a low glycemic index.
 ST review cheese protein fat amino acid vitamin mineral
 IT Amines, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (biogenic; cheese as important food in human nutrition)

IT Cheese
Human
Nutrients
Nutrition, animal
(cheese as important food in human nutrition)

IT Amino acids, biological studies
Fatty acids, biological studies
Mineral elements, biological studies
Sphingolipids
Trace elements, biological studies
Vitamins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cheese as important food in human nutrition)

IT Amino acids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(essential; cheese as important food in human nutrition)

IT Fats and Glyceridic oils, biological studies
Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(milk; cheese as important food in human nutrition)

IT **60-33-3D, Linoleic acid, conjugated**
63-42-3, Lactose
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cheese as important food in human nutrition)

RE.CNT 157 THERE ARE 157 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

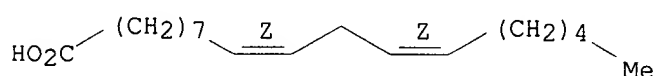
- (1) Anonym; Bull IDF 2003, V384, P1
- (2) Appel, L; New Engl J Med 1997, V336, P1117 MEDLINE
- (3) Arkbage, K; Int Dairy J 2003, V13, P101 HCAPLUS
- (4) Ausstellung; La France aux 1000 fromages 2002
- (5) Bachmann, H; Mitt Lebensm Hyg 2003, V94, P136 HCAPLUS
- (6) Balbi, J; Eur J Cancer Prev 2001, V10, P453 MEDLINE
- (7) Banni, S; Sci Aliments 2002, V22, P371 HCAPLUS
- (8) Barth, C; Forschungsber 1984, V36, P155 HCAPLUS
- (9) Berra, B; Eur J Cancer Prev 2002, V11, P193 MEDLINE
- (10) Blackwell, B; Brit J Pharmacol 1966, V26, P120 HCAPLUS
- (11) Blanc, B; Alimenta 1978, V17, P59 HCAPLUS
- (12) Blanchette, L; J Dairy Sci 1996, V79, P8 HCAPLUS
- (13) Blankson, H; J Nutr 2000, V130, P2943 HCAPLUS
- (14) Bonjour, J; Sci Aliments 2002, V22, P409 HCAPLUS
- (15) Boylston, T; Int Dairy J 2004, V14, P375 HCAPLUS
- (16) Brennan, P; Cancer Causes Contr 2000, V11, P49 MEDLINE
- (17) Burkhalter, G; IDF Bull 1981, V141, P1
- (18) Butikofer, U; Lebensm-Wiss u -Tech 1998, V31, P297 HCAPLUS
- (19) Cho, E; J Nat Cancer Inst 2004, V96, P1015 HCAPLUS
- (20) Collomb, M; J Dairy Res 2001, V68, P519 HCAPLUS
- (21) Collomb, M; Mitt Lebensm Hyg 2003, V94, P212 HCAPLUS
- (22) Collomb, M; Trav chim alimen hyg 2000, V91, P306
- (23) Corbo, M; J Dairy Sci 2001, V84, P551 HCAPLUS
- (24) Daigle, A; J Dairy Sci 1999, V82, P1081 HCAPLUS
- (25) de Vrese, M; Dt Milchwirt 2003, V54, P1066
- (26) der Kasefinder; http://www.cma.de/genuss_5565.php
- (27) Deutsche Gesellschaft Fur Ernährung; Empfehlungen fur die Nahrstoffzufuhr 1991
- (28) Deutsche Gesellschaft Fur Ernährung; Referenzwerte fur die Nahrstoffzufuhr 2000
- (29) Dhiman, T; J Dairy Sci 1999, V82, P412 HCAPLUS
- (30) Dillehay, D; J Nutr 1994, V124, P615 HCAPLUS
- (31) Dillon, J; Cheesemaking:from science to quality assurance 2000, P663
- (32) Dirienzo, D; Aust J Dairy Tech 2003, V58, P68 HCAPLUS

- (33) Fitzgerald, R; J Nutr 2004, V134, P980S HCAPLUS
- (34) Forssen, K; J Amer Coll Nutr 2000, V19, P100S HCAPLUS
- (35) Foster-Powell, K; Amer J Clin Nutr 2002, V76, P5 HCAPLUS
- (36) Fox, P; Adv Food Nutr Res 1995, V39, P163
- (37) Fremann, D; Public Health Nutr 2002, V5, P73
- (38) Fritsche, J; Fett-Lipid 1999, V101, P272 HCAPLUS
- (39) Fritsche, J; Z Lebensm-Untersuch-Forsch A 1998, V206, P77 HCAPLUS
- (40) Gagnaire, V; Int J Food Microbiol 2004, V94, P185 HCAPLUS
- (41) Gagnaire, V; J Agric Food Chem 2001, V49, P4402 HCAPLUS
- (42) Ganmaa, D; Int J Cancer 2002, V98, P262 HCAPLUS
- (43) Gardiner, G; Appl Environ Microbiol 1998, V64, P2192 HCAPLUS
- (44) Gardiner, G; J Agric Food Chem 1999, V47, P4907 HCAPLUS
- (45) Gardiner, G; J Dairy Sci 1999, V82, P1379 HCAPLUS
- (46) Garner, M; Int J Cancer 2003, V106, P934 HCAPLUS
- (47) Gennari, C; Public Health Nutr 2001, V4, P547 MEDLINE
- (48) Gennaro, M; Food Chem 2003, V82, P545 HCAPLUS
- (49) Gnädig, S; Thesis, University of Hamburg 2002
- (50) Gomes, A; J Dairy Sci 1998, V81, P1492 HCAPLUS
- (51) Gonder, U; Unterhaltsames und Informatives über fette Lügen und mehrfach ungesättigte Versprechungen 2004
- (52) Griinari, J; J Nutr 2000, V130, P2285 HCAPLUS
- (53) Gueguen, L; J Amer Coll Nutr 2000, V19, P119S HCAPLUS
- (54) Ha, Y; J Agric Food Chem 1989, V37, P75 HCAPLUS
- (55) Hauswirth, C; Circulation 2004, V109, P103 HCAPLUS
- (56) Heaney, R; J Amer Coll Nutr 2000, V19, P83S MEDLINE
- (57) Heaney, R; Osteoporosis Int 2000, V11, P985 HCAPLUS
- (58) Higginbotham, S; J Nat Cancer Inst 2004, V96, P229 HCAPLUS
- (59) Higham, S; Caries Res 1989, V23, P42 HCAPLUS
- (60) Hjartaker, A; Public Health Nutr 2002, V5, P1259 MEDLINE
- (61) Huang, Y; Nutr Res 1994, V14, P373 HCAPLUS
- (62) Hulshof, K; Eur J Clin Nutr 2003, V57, P128 MEDLINE
- (63) Jackson, K; J Amer Coll Nutr 2001, V20, P198S HCAPLUS
- (64) Jiang, J; Int Dairy J 1997, V7, P863 HCAPLUS
- (65) Kammerlehner, J; Kase-Technologie 2003
- (66) Kaselnd, S; <http://www.schweizerkaese.ch/ch-kaese/geschichte/broschuere/de.pdf>
- (67) Kashket, S; Nutr Rev 2002, V60, P97
- (68) Kato, K; Biosci Biotechnol Biochem 2002, V66, P2342 HCAPLUS
- (69) Krajcovicova-Kudlackova, M; Ann Nutr Metab 2000, V44, P135 HCAPLUS
- (70) Kreuzer, M; Int J Cancer 2002, V100, P706 HCAPLUS
- (71) Larosa, J; Circulation 1990, V81, P1721 MEDLINE
- (72) Lavanchy, P; Schweiz Milchwirtschaftl Forsch 1993, V22, P65 HCAPLUS
- (73) Lavillonniere, F; J Amer Oil Chem Soc 1998, V75, P343 HCAPLUS
- (74) Lin, H; J Dairy Sci 1995, V78, P2358 HCAPLUS
- (75) Ma, D; J Agric Food Chem 1999, V47, P1956 HCAPLUS
- (76) Macdonald, H; J Amer Coll Nutr 2000, V19, P111S HCAPLUS
- (77) Marilley, L; Int J Food Microbiol 2004, V90, P139 HCAPLUS
- (78) Marteau, P; Sci Aliments 2002, V22, P431 HCAPLUS
- (79) Mayne, S; J Nat Cancer Inst 1994, V86, P33 MEDLINE
- (80) McBean, L; Dairy Council Dig 2002, V73, P25
- (81) McCarron, D; Am J Hypertension 2004, V17, P88
- (82) McCarron, D; Sci Aliments 2002, V22, P415 HCAPLUS
- (83) Mc Brearty, S; Int Dairy J 2001, V11, P599 HCAPLUS
- (84) Medici, M; Int Dairy J 2004, V14, P611
- (85) Meisel, H; Milchwissenschaft 1997, V52, P307 HCAPLUS
- (86) Merrill, A; Bull Int Dairy Fed 2001, V363, P27 HCAPLUS
- (87) Morabia, A; Eur J Clin Nutr 2000, V54, P684 HCAPLUS
- (88) Mykkanen, H; Scand J Gastroenterol 1994, V29, P29 MEDLINE
- (89) Nager, F; Schweiz Med Wschr 1965, V95, P1146
- (90) Nitzan, K; Public Health Rev 2001, V29, P71

- (91) Norat, T; Eur J Clin Nutr 2003, V57, P1 MEDLINE
- (92) Norris, C; Aust J Dairy Tech 2003, V58, P201
- (93) Osterreichs; <http://www.kaese.at>
- (94) Ozasa, K; Jpn J Cancer Res 2001, V92, P1259 HCAPLUS
- (95) Pariza, M; Am J Clin Nutr 2004, V79, P1132S HCAPLUS
- (96) Parodi, P; Austr J Dairy Technol 2004, V59, P3 HCAPLUS
- (97) Parrot, S; Nahrung 2003, V47, P87 HCAPLUS
- (98) Pelletier, X; Nutr Res 1998, V18, P767 HCAPLUS
- (99) Pereira, M; J Amer Med Ass 2002, V287, P2081
- (100) Pfeuffer, M; Bull Int Dairy Fed 2001, V363, P46
- (101) Pomerleau, J; Brit J Nutr 2003, V89, P827 HCAPLUS
- (102) Prandini, A; Ital J Food Sci 2001, V13, P243 HCAPLUS
- (103) Prattala, R; Eur J Public Health 2003, V13, P124
- (104) Ravnskou, U; J Clin Epidemiol 1998, V51, P443
- (105) Renner, E; Chemistry, physics and microbiology 1993, V1, P557
- (106) Reynolds, E; J Dent Res 1995, V74, P1272 HCAPLUS
- (107) Riserus, U; Int J Obesity 2001, V25, P1129 HCAPLUS
- (108) Ritzenthaler, K; J Nutr 2001, V131, P1548 HCAPLUS
- (109) Rosen, S; J Dent Res 1984, V63, P894 MEDLINE
- (110) Russell, R; J Nutr 2001, V131, P291 HCAPLUS
- (111) Sacks, F; New Engl J Med 2001, V344, P3 MEDLINE
- (112) Salminen, S; Int Dairy J 1995, V5, P259 HCAPLUS
- (113) Sanchez-Villegas, A; Eur J Clin Nutr 2003, V57, P917 MEDLINE
- (114) Scherz, H; Souci Fachmann Kraut 2000
- (115) Schneider, H; <http://www.bag.admin.ch/verbrau/d/Die%20Kosten%20der%20Adipositas> 2004
- (116) Schone, F; Milchwissenschaft 2003, V58, P486
- (117) Schuurman, A; Brit J Cancer 1999, V80, P1107 MEDLINE
- (118) Sieber, R; Ernährung 1990, V14, P63 HCAPLUS
- (119) Sieber, R; Ernährung 1995, V19, P265 HCAPLUS
- (120) Sieber, R; Ernährung 1998, V22, P196 HCAPLUS
- (121) Sieber, R; FAM-Information, http://www.alp.admin.ch/de/publikationen/pub_detail.php?id=15231 2001, V426, P1
- (122) Sieber, R; Int Dairy J 2004, V14, P1 HCAPLUS
- (123) Sieber, R; Lebensm Tech 1988, V21, P9
- (124) Sieber, R; Mitt Geb Lebens Hyg 1990, V81, P82
- (125) Sieber, R; Mitt Gebiete Lebensm Hyg 1987, V78, P106 HCAPLUS
- (126) Sieber, R; Mitt Gebiete Lebensm Hyg 1994, V85, P366 HCAPLUS
- (127) Sieber, R; Mitt Lebensm Hyg 2001, V92, P68 HCAPLUS
- (128) Sieber, R; Schweiz Landwirtschaftl Forsch 1988, V27, P251
- (129) Sieber, R; Schweiz Landwirtschaftliche Forsch 1992, V31, P33
- (130) Sieber, R; Schweiz Milchwirt Forsch 1996, V25, P25 HCAPLUS
- (131) Sieber, R; Z Ernährungswiss 1997, V36, P375 HCAPLUS
- (132) Silva, M; Caries Res 1986, V20, P263 MEDLINE
- (133) Silverwood, B; Paediatr Nurs 2003, V15, P27
- (134) Sjogren, P; J Nutr 2004, V134, P1729 HCAPLUS
- (135) Smacchi, E; Enzyme Microb Tech 1998, V22, P687 HCAPLUS
- (136) Sollberger, H; Schweiz Milchwirt Forsch 1991, V20, P63
- (137) Steffen, C; Landwirt Schweiz 1992, V5, P209
- (138) Steffen, C; Lebensm Wiss & Technol 1975, V8, P1 HCAPLUS
- (139) Stepaniak, L; Ital J Food Sci 2001, V13, P373 HCAPLUS
- (140) Sutter-Leuzinger, A; Vierter Schweizerischer Ernährungsbericht 1998, P28
- (141) Taubes, C; Science 1998, V281, P898
- (142) Tavani, A; J Epidemiol Comm Health 2002, V56, P471 MEDLINE
- (143) Tavani, A; Prostate 2001, V48, P118 HCAPLUS
- (144) Tome, D; Sci Aliments 2002, V22, P393 HCAPLUS
- (145) Tscahger, E; Dt Molkerei-Ztg 2003, V124, P29
- (146) Turpeinen, A; Amer J Clin Nutr 2002, V76, P504 HCAPLUS
- (147) Usda; <http://www.nal.usda.gov/fnic/foodcomp/>
- (148) van Dokkum, W; Brit J Nutr 1996, V75, P893 HCAPLUS

(149) van der Meer, R; Cancer Lett 1997, V114, P75 HCAPLUS
 (150) Vesper, H; J Nutr 1999, V129, P1239 HCAPLUS
 (151) Vinderola, C; J Dairy Sci 2000, V83, P1905 HCAPLUS
 (152) Werner, S; J Agric Food Chem 1992, V40, P1817 HCAPLUS
 (153) Worm, N; Die LOGI-Methode in Theorie und Küche 2003
 (154) Yilmaztekin, M; Int J Food Sci Nutr 2004, V55, P53 HCAPLUS
 (155) Zemel, M; J Nutr 2003, V133, P252S
 (156) Zemel, M; Obesity Res 2004, V12, P582 HCAPLUS
 (157) Zlatanov, S; Food Chem 2002, V78, P471 HCAPLUS
 IT **60-33-3D, Linoleic acid, conjugated**
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (cheese as important food in human nutrition)
 RN 60-33-3 HCAPLUS
 CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L66 ANSWER 5 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN **2005:416150** HCAPLUS
 DN 143:132452
 ED Entered STN: 16 May 2005
 TI The combination of dietary **conjugated linoleic acid** and treadmill exercise lowers gain in body fat mass and enhances lean body mass in high fat-fed male Balb/C mice
 AU Bhattacharya, Arunabh; Rahman, Md. Mizanur; Sun, Dongxu; Lawrence, Richard; Mejia, Walter; McCarter, Roger; O'Shea, Marianne; Fernandes, Gabriel
 CS Department of Medicine, Division of Clinical Immunology, University of Texas Health Science Center, San Antonio, TX, 78229-3900, USA
 SO Journal of Nutrition (2005), 135(5), 1124-1130
 CODEN: JONUAI; ISSN: 0022-3166
 PB American Society for Nutritional Sciences
 DT Journal
 LA English
 CC 18-5 (Animal Nutrition)
 AB Nearly half of the U.S. adult population is overweight or obese, which may be related to increased energy intake combined with lack of phys. activity. Obesity increases the risk of several chronic diseases including diabetes, coronary heart disease, **hypertension**, and stroke. **Conjugated linoleic acids** (**CLA**) were shown to decrease fat and increase lean mass in several animal studies. However, the effects of **CLA** in combination with exercise (Ex) on body composition have not been studied in an animal model. We examined the effect of a low concentration of either safflower oil as control (0.5%) or mixed isomers of **CLA** (0.4%) along with treadmill exercise on body composition in male Balb/C mice fed a high-fat diet (20% corn oil) in a 2 + 2 factorial design. **CLA** consumption lowered change in fat mass (P < 0.001) confirming the results of other studies, and change in fat mass decreased further (P < 0.001) with **CLA** and exercise. Change in lean mass did not increase with exercise alone; it increased, although not significantly, with **CLA** alone and increased significantly (P < 0.05) due to the combination of **CLA** and exercise. This effect was accompanied by decreased serum leptin levels and lower leptin mRNA expression in peritoneal fat (P < 0.001).

Serum insulin, glucose, tumor necrosis factor (TNF)- α , and interleukin-6 were lower in **CLA**-fed mice than in controls ($P < 0.05$), whereas serum TNF- α was increased by exercise ($P < 0.05$). Exercise increased oxygen consumption and energy expenditure when measured under resting conditions ($P < 0.05$). In summary, the combination of dietary **CLA** and exercise decreased fat mass and increased lean mass in mice fed a high-fat diet, and these effects may be related in part to decreased serum leptin and exercise-induced increases in oxygen consumption and energy expenditure.

- ST exercise diet **conjugated linoleic acid** body fat leptin
- IT Cytokines
RL: BSU (Biological study, unclassified); BIOL (Biological study) (adiponectin; dietary **conjugated linoleic acid** and treadmill exercise lowers gain in body fat mass and enhances lean body mass in high fat-fed male Balb/C mice)
- IT Adipose tissue
Body weight
Energy metabolism, animal
Respiration, animal
(dietary **conjugated linoleic acid** and treadmill exercise lowers gain in body fat mass and enhances lean body mass in high fat-fed male Balb/C mice)
- IT Interleukin 6
Tumor necrosis factors
RL: BSU (Biological study, unclassified); BIOL (Biological study) (dietary **conjugated linoleic acid** and treadmill exercise lowers gain in body fat mass and enhances lean body mass in high fat-fed male Balb/C mice)
- IT Diet
(supplements; dietary **conjugated linoleic acid** and treadmill exercise lowers gain in body fat mass and enhances lean body mass in high fat-fed male Balb/C mice)
- IT Exercise
(treadmill; dietary **conjugated linoleic acid** and treadmill exercise lowers gain in body fat mass and enhances lean body mass in high fat-fed male Balb/C mice)
- IT 50-99-7, D-Glucose, biological studies 9004-10-8, Insulin, biological studies 121250-47-3, **Conjugated linoleic acid** 169494-85-3, Leptin
RL: BSU (Biological study, unclassified); BIOL (Biological study) (dietary **conjugated linoleic acid** and treadmill exercise lowers gain in body fat mass and enhances lean body mass in high fat-fed male Balb/C mice)

RE.CNT 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Avula, C; J Appl Physiol 2001, V91, P2546 MEDLINE
- (2) Avula, C; J Clin Immunol 1999, V19, P35 HCAPLUS
- (3) Banni, S; Curr Opin Lipidol 2002, V13, P261 HCAPLUS
- (4) Belury, M; Annu Rev Nutr 2002, V22, P505 HCAPLUS
- (5) Belury, M; J Nutr 2002, V132, P2995 HCAPLUS
- (6) Boudou, P; Eur J Endocrinol 2003, V149, P421 HCAPLUS
- (7) Bruun, J; Am J Physiol 2003, V285, PE527 HCAPLUS
- (8) Buettnner, R; Am J Physiol 2000, V278, PE563 HCAPLUS
- (9) Chin, S; J Food Comp Anal 1992, V5, P185 HCAPLUS
- (10) Choi, Y; J Nutr 2000, V130, P1920 HCAPLUS
- (11) Consolazio, C; Physiological Measurements of Metabolic Functions in Man 1963
- (12) Cook, M; Poult Sci 1993, V72, P1301 HCAPLUS
- (13) DeLany, J; Am J Physiol 1999, V276, PR1172 MEDLINE

- (14) Durgam, V; Cancer Lett 1997, V116, P121 HCAPLUS
- (15) Fernandes, G; J Hypertens 1986, V4, PS469 MEDLINE
- (16) Fritsche, J; Advances in Conjugated Linoleic Acid Research 1999, V1, P378 HCAPLUS
- (17) Gaullier, J; Am J Clin Nutr 2004, V79, P1118 HCAPLUS
- (18) Gavino, V; J Nutr 2000, V130, P27 HCAPLUS
- (19) Gleeson, M; Br J Nutr 1982, V47, P173 HCAPLUS
- (20) Gomez-Merino, D; Med Sci Sports Exerc 2002, V34, P1594 HCAPLUS
- (21) Hargrave, K; Obes Res 2004, V12, P1435 HCAPLUS
- (22) Hedley, A; J Am Med Assoc 2004, V291, P2847 HCAPLUS
- (23) Houseknecht, K; Biochem Biophys Res Commun 1998, V244, P678 HCAPLUS
- (24) Hubbard, N; Cancer Lett 2003, V190, P13 HCAPLUS
- (25) Ip, C; Nutr Cancer 2002, V43, P52 HCAPLUS
- (26) Kamohara, S; Nature (Lond) 1997, V389, P374 HCAPLUS
- (27) Kamphuis, M; Int J Obes Relat Metab Disord 2003, V27, P840 HCAPLUS
- (28) Kepler, C; J Biol Chem 1966, V241, P1350 HCAPLUS
- (29) Kinugawa, T; Int J Cardiol 2003, V87, P83
- (30) Kopelman, P; Nature (Lond) 2000, V404, P635 HCAPLUS
- (31) Koutsari, C; Int J Obes Relat Metab Disord 2003, V27, P901 HCAPLUS
- (32) Kreider, R; J Strength Cond Res 2002, V16, P325
- (33) Kriketos, A; Diabetes Care 2004, V27, P629
- (34) Lin, H; J Dairy Sci 1995, V78, P2358 HCAPLUS
- (35) Matsuzawa, Y; Ann NY Acad Sci 1999, V892, P146 HCAPLUS
- (36) McCarter, R; Aging (Milano) 1997, V9, P73 HCAPLUS
- (37) Miller, C; Biochem Biophys Res Commun 1994, V198, P1107 HCAPLUS
- (38) Nagao, K; Biochem Biophys Res Commun 2003, V306, P134 HCAPLUS
- (39) Nagao, K; Biochem Biophys Res Commun 2003, V310, P562 HCAPLUS
- (40) Nagao, K; Nutrition 2003, V19, P652 HCAPLUS
- (41) Ohnuki, K; Lipids 2001, V36, P583 HCAPLUS
- (42) Ostrowska, E; Br J Nutr 2003, V89, P219 HCAPLUS
- (43) Ostrowski, K; J Physiol 1999, V515, P287 HCAPLUS
- (44) O'Shea, M; Am J Clin Nutr 2004, V79, P1199S HCAPLUS
- (45) Park, Y; Lipids 1997, V32, P853 HCAPLUS
- (46) Park, Y; Lipids 1999, V34, P235 HCAPLUS
- (47) Park, Y; Lipids 1999, V34, P243 HCAPLUS
- (48) Reeves, P; J Nutr 1993, V123, P1939 HCAPLUS
- (49) Riserus, U; Diabetologia 2004, V47, P1016 HCAPLUS
- (50) Ross, R; Obes Res 2004, V12, P789
- (51) Ryan, A; Int J Obes Relat Metab Disord 2003, V27, P1066 HCAPLUS
- (52) Smedman, A; Lipids 2001, V36, P773 HCAPLUS
- (53) Sun, D; Clin Diagn Lab Immunol 2001, V8, P1003 MEDLINE
- (54) Sun, D; J Bone Miner Res 2003, V18, P1206 HCAPLUS
- (55) Swinburn, B; Public Health Nutr 2004, V7, P123 MEDLINE
- (56) Thom, E; J Int Med Res 2001, V29, P392 HCAPLUS
- (57) Vassilakopoulos, T; J Appl Physiol 2003, V94, P1025 HCAPLUS
- (58) Vendrell, J; Obes Res 2004, V12, P962 HCAPLUS
- (59) Wang, Y; Int J Obes Relat Metab Disord 2004, V28, P941 HCAPLUS
- (60) West, D; Am J Physiol 1998, V275, PR667 HCAPLUS
- (61) Wilson, T; Nutr Res 2000, V20, P1795 HCAPLUS
- (62) Yamasaki, M; Nutrition 2003, V19, P30 HCAPLUS
- (63) Yu, Y; Biochim Biophys Acta 2002, V1581, P89 HCAPLUS
- (64) Zhou, X; J Endocrinol 1998, V159, P165 HCAPLUS

IT 121250-47-3, **Conjugated linoleic acid**

RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (dietary **conjugated linoleic acid** and
 treadmill exercise lowers gain in body fat mass and enhances lean body
 mass in high fat-fed male Balb/C mice)

RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO₂C-(CH₂)₁₆-Me

L66 ANSWER 6 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:150645 HCAPLUS

DN 143:228786

ED Entered STN: 23 Feb 2005

TI The influence that Momordica charantia Linn tea intake gives to a body

AU Itagaki, Etsuko; Sato, Noriko; Takakuda, Akira; Itagaki, Kazuo

CS Dep. Health Pharmacy, Kyoritsu Univ. Pharmacy, Japan

SO Kyoritsu Yakka Daigaku Kenkyu Nenpo (2004), Volume Date 2003, 48, 1-13

CODEN: KYDKAJ; ISSN: 0452-9731

PB Kyoritsu Yakka Daigaku

DT Journal

LA English

CC 18-7 (Animal Nutrition)

AB The authors, with the goal of control to an appropriate weight through loss of fat, investigated whether Body Composition (BC), i.e., weight and fat (%)

and

the circulatory system, i.e., **Blood Pressure** (BP), would be affected by long-term intake of tea made from Momordica charantia Linn, which has the highest **Conjugated Linoleic Acid (CLA)** content among natural foods that are considered to have minimal neg. impact on the body, over a long period of time. 1. Both Body Mass Index (BMI) and fat (%) decreased regardless of the performance of exercise. 2. For a high BP, results of a decrease were obtained with long-term intake of **CLA**. 3. Results with improvement of cardiopulmonary function alone were not obtained. 4. The diet was implemented without changing lifestyle, so there was no deterioration in phys. condition. Based on these results, intake of **CLA** did have an effect in reducing body weight and fat without changing eating habits and lifestyle, so the fact that it is effective in weight control through fat loss has been obtained as a result.

ST conjugated linoleate Momordica tea body fat wt

IT Tea products

(beverages; influence of Momordica charantia linn tea intake on body weight, body fat, and **blood pressure**)

IT Adipose tissue

Blood pressure

Body weight

Momordica charantia

(influence of Momordica charantia linn tea intake on body weight, body fat, and **blood pressure**)

IT 121250-47-3, **Conjugated linoleic acid**

RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); BIOL (Biological study); OCCU (Occurrence)

(influence of Momordica charantia linn tea intake on body weight, body fat, and **blood pressure**)

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Etsuko, I; Ann Rept Kyoritsu Coll Pharm 1997, 42, P1

(2) Etsuko, I; Ann Rept Kyoritsu Coll Pharm 1998, 41, P19

(3) Hauman, B; INFORM 1996, V7(2), P152

- (4) Kara, H; The Journal of Immunology 1993, V151, P5186
 (5) Kenji, H; Biochemistry and application of Conjugated linoleic acid
 (6) Kunio, I; Conjugated Linoleic Acid (2) Clinical nutrition 1995, V87(2), P137
 (7) Lee, K; Atherosclerosis 1994, V108, P19 HCAPLUS
 (8) McCarthy, T; The Endocrinology 1989, V124(1), P301 HCAPLUS
 (9) Nicolosi, R; Artery 1997, V22(5), P266 HCAPLUS
 (10) Pariza, M; Carcinogenesis 1985, V6(4), P591 HCAPLUS
 (11) West, D; Effects of conjugated linoleic acid on body fat and energy metabolism in the mouse 1998, P667
 (12) Yeonhwa, P; Lipids 1997, V32(8), P853
 (13) Yoshikuni, Y; Food and development 1998, V33(6), P37
 IT **121250-47-3, Conjugated linoleic acid**
 RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); BIOL (Biological study); OCCU (Occurrence)
 (influence of Momordica charantia linn tea intake on body weight, body fat, and **blood pressure**)
 RN 121250-47-3 HCAPLUS
 CN Octadecadienoic acid (9CI) (CA INDEX NAME)
 CM 1
 CRN 57-11-4
 CMF C18 H36 O2

HO₂C-(CH₂)₁₆-Me

L66 ANSWER 7 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN **2005:87444** HCAPLUS
 DN 142:391395
 ED Entered STN: 01 Feb 2005
 TI Nutritional regulation of immunosenescence for heart health
 AU Watson, Ronald Ross; Zibadi, Sherma; Vazquez, Randy; Larson, Douglas
 CS Division of Health Promotion Sciences, Mel and Enid Zuckerman Arizona College of Public Health, Tucson, AZ, 85724, USA
 SO Journal of Nutritional Biochemistry (2005), 16(2), 85-87
 CODEN: JNBIEL; ISSN: 0955-2863
 PB Elsevier Inc.
 DT Journal; General Review
 LA English
 CC 18-0 (Animal Nutrition)
 Section cross-reference(s): 14
 AB A review. Immunosenescence via increased inflammatory cytokines may have key regulatory roles in facilitating cardiac infections and heart failure. Cytokine polarization due to aging may directly dysregulate fibroblasts and lead to altered cardiac structure and dysfunction. Some dietary fatty acids could ameliorate heightened inflammatory cytokines and retard cardiac pathol., loss of structural collagen, and premature death from heart failure. The T-helper (Th) 2 cell cytokine levels are very high in seniors with increased risk of heart disease due to suppressed resistance to cardiotropic pathogens. Such inflammatory cytokines deregulate fibroblasts, decrease collagen synthesis, and weaken muscle structure and heart pump function for heart failure and **hypertension**. Dietary supplementation with polyunsatd. n-3 fatty **acids** (PUFA) or **conjugated linoleic acids** may provide a sensible and widely available way to treat and even prevent excessive inflammatory cytokines and their cardiotoxic effects via decreased Th2 and

increased Th1 cytokines. Dietary n-6 PUFA may promote cytokine polarization in seniors, thus exacerbating age-related heart dysfunction.

ST review nutrition polyunsatd fatty acid inflammation cytokine heart disease

IT Aging, animal
Cardiovascular system, disease
Human
Nutrition, animal
(nutritional regulation of immunosenescence for heart health)

IT Cytokines
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(nutritional regulation of immunosenescence for heart health)

IT Fatty acids, biological studies
RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL
(Biological study); USES (Uses)
(polyunsatd.; nutritional regulation of immunosenescence for heart health)

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Chavali, S; Prostaglandins Leukot Essent Fatty Acids 1999, V61, P347 HCAPLUS
- (2) Dollery, C; Circ Res 1995, V77, P863 HCAPLUS
- (3) Jolly, C; J Clin Immunol 1999, V19, P171
- (4) Lim, B; J Nutr 2000, V130, P1657 HCAPLUS
- (5) Lopez-Garcia, E; J Nutr 2004, V134, P1806 HCAPLUS
- (6) Malaguarnera, L; Arch Gerontol Geriatr 2001, V32, P1 HCAPLUS
- (7) Pauschinger, M; Heart Fail Rev 2004, V9, P21 HCAPLUS
- (8) Sepulveda, R; Cardiovasc Toxicol, in press 2004
- (9) Trebble, T; Am J Clin Nutr 2003, V78, P376 HCAPLUS
- (10) Yang, M; Exp Biol Med (Maywood) 2003, V228, P51 HCAPLUS
- (11) Yu, Q; Cardiovasc Toxicol 2004, V4, P37

L66 ANSWER 8 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:1011667 HCAPLUS

DN 142:253368

ED Entered STN: 24 Nov 2004

TI A perspective on the current strategies for the treatment of obesity

AU Joyal, Steven V.

CS Global Clinical Research, Pharmaceutical Research Institute, Bristol-Myers Squibb, Princeton, NJ, USA

SO Current Drug Targets: CNS & Neurological Disorders (2004), 3(5), 341-356
CODEN: CDTCCC; ISSN: 1568-007X

PB Bentham Science Publishers Ltd.

DT Journal; General Review

LA English

CC 1-0 (Pharmacology)

AB A review. The prevalence in obesity has increased dramatically over the past 30 years, more than double in the United States alone. Obesity is associated with an increased risk for type 2 diabetes mellitus, dyslipidemia, **hypertension**, biliary disease, obstructive sleep apnea, and certain types of cancer. The pathophysiol. of obesity is complex, involving behavioral, environmental, and genetic factors. Current treatment options include behavior modification and lifestyle changes which incorporate weight-reducing diets and phys. activity, FDA approved long-term anti-obesity pharmacol. agents sibutramine and orlistat, non-FDA approved over-the-counter (OTC) supplements and nutraceuticals, and, when appropriate, bariatric surgery. Without adequate prevention and treatment of obesity, government agencies have suggested that the direct and indirect costs associated with obesity may overwhelm the healthcare system. This brief review explores the current data available on treatments for the obese patient including the relative merits of different types of

macronutrient composition (e.g., low carbohydrate vs. high carbohydrate diets) of weight-reducing diets, the value of resistance/ strength training in phys. activity programs designed for the obese patient, the safety and efficacy associated with OTC supplements and nutraceuticals for weight reduction (e.g., Ephedra, **conjugated linoleic acid** (CLA), Garcinia cambogia/ hydroxycitric acid (HCA), chromium, pyruvate), the safety and efficacy of FDA-approved long-term obesity treatments sibutramine and orlistat, and bariatric surgery.

ST review obesity diet exercise sibutramine orlistat Ephedra wt redn

IT Surgery
(bariatric; perspective on current strategies for treatment of obesity)

IT Antiobesity agents
Body weight
Ephedra
Exercise
Human
Obesity
(perspective on current strategies for treatment of obesity)

IT Diet
(reducing; perspective on current strategies for treatment of obesity)

IT Diet
(supplements; perspective on current strategies for treatment of obesity)

IT 96829-58-2, Orlistat 106650-56-0, Sibutramine
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(perspective on current strategies for treatment of obesity)

RE.CNT 180 THERE ARE 180 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Abbasi, F; Am J Cardiol 2000, V1(851), P45
- (2) Abbott Laboratories; Reductil [package insert] 2000
- (3) Adriaens, M; Br J Nutr 2003, V90(2), P419 HCAPLUS
- (4) Althuis, M; Am J Clin Nutr 2002, V76(1), P148 HCAPLUS
- (5) American College Of Sports Medicine Position Stand; Med Sci Sports Exerc 1998, V30(6), P975
- (6) Anderson, R; Diabetes 1997, V46, P1786 HCAPLUS
- (7) Anon; 1997, CPMP/EWP/281/96
- (8) Anon; 2002, EMEA/CPMP/3065/02
- (9) Anon; A Federal Trade Commission Staff Report, "Weight Loss Advertising Report" 2002
- (10) Anon; Guidance for the clinical evaluation of weight control drugs 1996
- (11) Anon; Issue brief (Grantmakers Health) 2001, V11, P1
- (12) Anon; MMWR Morb Mortal Wkly Rep 2002, V51(19), P412
- (13) Anon; Nutrition Business Journal, Supplement Business Report 2002
- (14) Astrup, A; Int J Obes Relat Metab Disord 2000, V24(12), P1545 HCAPLUS
- (15) Astrup, A; Obes Rev 2002, V3(2), P57
- (16) Asztalos, B; J Lipid Res 2000, V41(3), P321 HCAPLUS
- (17) Bach, D; Obes Res 1999, V7, P363 HCAPLUS
- (18) Badmaev, V; Nutracon 1995, Nutraceuticals, Dietary Supplements and Functional Foods 1995
- (19) Bagchi, D; Res Commun Mol Pathol Pharmacol 1997, V97(3), P335 HCAPLUS
- (20) Bagchi, D; Res Commun Mol Pathol Pharmacol 1998, V99(2), P240 HCAPLUS
- (21) Bahadori, B; Diabetes 1999, V48(suppl), PA349
- (22) Bell, E; Am J Clin Nutr 2001, V73(6), P1010 HCAPLUS
- (23) Bell, F; J Physiol Behav 2003, V78(4-5), P593
- (24) Belury, M; J Nutr 2002, V132(10), P2995 HCAPLUS
- (25) Blaak, E; Metabolism 1996, V45(10), P1235 HCAPLUS
- (26) Blair, S; Annu Rev Public Health 1992, V13, P99 MEDLINE
- (27) Blair, S; Res Q Exerc Sport 1996, V67(2), P193 MEDLINE
- (28) Blankson, H; J Nutr 2000, V130(12), P2943 HCAPLUS

- (29) Boreham, C; J Sports Sci 2001, V19(12), P915 MEDLINE
- (30) Bray, G; Obes Res 1999, V7, P189 HCAPLUS
- (31) Bray, G; Obes Res 1999, V7, P189 HCAPLUS
- (32) Brown, J; J Nutr 2003, V133(10), P3041 HCAPLUS
- (33) Bungum, T; Am J Health Behav 2003, V27(4), P456
- (34) Canovatchel, W; 16th International Diabetes Federation Congress 1997
- (35) Castaneda, C; Diabetes Care 2002, V25(12), P2335
- (36) Centers For Disease Control And Prevention; MMWR Morb Mortal Wkly Rep 2003, V52(32), P764
- (37) Centers For Disease Control And Prevention; MMWR Morb Mortal Wkly Rep 2004, V3(4), P80
- (38) Centers For Disease Control And Prevention; MMWR Morb Mortal Wkly Rep 2004, V53(4), P82
- (39) Centers For Disease Control And Prevention; MMWR Morb Mortal Wkly Rep 2004, V53(4), P82
- (40) Chevallier, J; Obes Surg 2002, V12(93), POE99
- (41) Chevion, S; Proc Natl Acad Sci U S A 2003, V100(9), P5119 HCAPLUS
- (42) Cicalese, L; Am J Surg 1996, V171(1), P97 HCAPLUS
- (43) Clouatre, D; The Diet and Health Benefits of HCA (Hydroxycitric Acid) 1994
- (44) Cole, J; J Clin Psychopharmacol 1998, V18, P231 HCAPLUS
- (45) Collin, A; Br J Nutr 2003, V90(2), P261 HCAPLUS
- (46) Colman, E; N Engl J Med 2000, V342, P1141 MEDLINE
- (47) Committee On Emerging Surgical Technology And Education; Bull Am Coll Surg 2000, V85(9, 20), POE23
- (48) Conte, A; Am J Bariatric Med 1993, P17
- (49) Cordain, L; Eur J Clin Nutr 2002, V56(3), P181 HCAPLUS
- (50) Dansinger, M; American Heart Association Scientific Sessions November 12, 2003 in Orlando
- (51) Davidson, M; JAMA 1999, V281, P235 HCAPLUS
- (52) Delany, J; Am J Physiol 1999, V276(4 Pt 2), PR1172 MEDLINE
- (53) Demaria, E; Ann Surg 2001, V233(6, 809), POE818
- (54) Drenick, E; JAMA 1980, V243(5), P443 MEDLINE
- (55) Dujovne, C; Am Heart J 2001, V142, P489 HCAPLUS
- (56) D'Orazio, N; Int J Immunopathol Pharmacol 2003, V16(3), P215 HCAPLUS
- (57) Eaton, S; World Rev Nutr Diet 2001, V90, P5 MEDLINE
- (58) El-Atat, F; Endocrinol Metab Clin North Am 2003, V32(4), P823 HCAPLUS
- (59) Epstein, L; Physiol Behav 2003, V78(2), P221 HCAPLUS
- (60) Fang, J; Am J Gastroenterol 2003, V98(9), P2097
- (61) Felicetti, L; Physiol Biochem Zool 2003, V76(2), P256
- (62) Fielding, G; Surg Endosc 1999, V13(550), POE554
- (63) Fobi, M; J Natl Med Assoc 2004, V96(1), P61 MEDLINE
- (64) Foster, G; Engl J Med 2003, V22(34821), P2082
- (65) Fujioka, K; Diabetes Obes Metab 2000, V2, P175 HCAPLUS
- (66) Gardin, J; JAMA 2000, V283, P1703 HCAPLUS
- (67) Gargas, M; Drug Metab Dispos 1994, V22(4), P522 HCAPLUS
- (68) Gaullier, J; Lipids 2002, V37(11), P1019 HCAPLUS
- (69) Gillies, P; J Am Diet Assoc 2003, V103(12 Suppl 2), PS50
- (70) Griffen, W; Ann Surg 1977, V186, P500
- (71) Grimsgaard, S; Am J Clin Nutr 1997, V66(3), P649 HCAPLUS
- (72) Guerciolini, R; Int J Obes Relat Metab Disord 1997, V21(Suppl 3), PS12
- (73) Hadorn, D; J Clin Epidemiol 1996, V49(7), P749 MEDLINE
- (74) Haller, C; N Engl J Med 2000, V343(25), P1833 HCAPLUS
- (75) Hamazaki, K; Lipids 2003, V38(4), P353 HCAPLUS
- (76) Hansen, D; Am J Clin Nutr 1998, V68, P1180 HCAPLUS
- (77) Haskell, W; Med Sci Sports Exerc 1994, V26(6), P649 MEDLINE
- (78) Hays, J; Mayo Clin Proc 2003, V78(11), P1331 HCAPLUS
- (79) He, K; BMJ 2003, V327(7418), P777 HCAPLUS
- (80) Heal, D; Psychopharmacology 1992, V107, P303 HCAPLUS
- (81) Heilbronn, L; Am J Clin Nutr 2003, V78(3), P361 HCAPLUS
- (82) Hepburn, D; Polyhedron 2003, V22(12), P455

- (83) Hess, D; Obes Surg 1998, V8(3), P267 MEDLINE
- (84) Hess, D; Obes Surg 1998, V8(267), PE282
- (85) Hetherington, M; Int J Eat Disord 2000, V28(3), P272 MEDLINE
- (86) Heymsfield, S; JAMA 1998, V280(18), P1596 HCAPLUS
- (87) Holten, M; Diabetes 2004, V53(2), P294 HCAPLUS
- (88) Houseknecht, K; Biochem Biophys Res Commun V244(3), P678 HCAPLUS
- (89) Houseknecht, K; Biochem Biophys Res Commun 1998, V247(3), P911 HCAPLUS
- (90) Hu, F; Am J Clin Nutr 1999, V70(6), P1001 HCAPLUS
- (91) Ip, M; Mammary Gland Biol Neoplasia 2003, V8(1), P103
- (92) Isasi, C; Pediatrics 2003, V111(2), P332
- (93) James, W; Lancet 2000, V356, P2119 HCAPLUS
- (94) Jena, B; J Agric Food Chem 2002, V50(1), P10 HCAPLUS
- (95) Jovanovic-Peterson, L; Trace Elem Exp Med 1999, V12, P91
- (96) Kalman, D; Med Sci Sports Exerc 1998, V30, PS156
- (97) Kalman, D; Nutrition 1999, V15(5), P337 HCAPLUS
- (98) Kamphuis, M; Int J Obes Relat Metab Disord 2003, V27(7), P840 HCAPLUS
- (99) Kato, I; Eur J Epidemiol 1998, V14(6), P621 HCAPLUS
- (100) Katz, D; Public Health Rev 2003, V31(1), P33
- (101) Kral, J; Int J Obes Relat Metab Disord 2001, V25(Suppl 1), PS107
- (102) Kremen, A; Ann Surg 1954, V140(3), P439 MEDLINE
- (103) Kuzmak, L; AORN J 1990, V51(5), P1307 MEDLINE
- (104) Larimore, W; Ann Pharmacother 2003, V37(6), P893
- (105) Lee, I; Biol Sci Med Sci 2001, V56, P7
- (106) Lee, M; Toxicol Sci 2000, V56(2), P424 HCAPLUS
- (107) Lim, K; J Nutr Sci Vitaminol (Tokyo) 2002, V48(2), P128 HCAPLUS
- (108) Ling, M; Clin Exp Immunol 1995, V102(3), P582 MEDLINE
- (109) Livingstone, M; Proc Nutr Soc 2003, V62(3), P681 MEDLINE
- (110) Lowenstein, J; J Biol Chem 1971, V246, P629 HCAPLUS
- (111) Manson, J; Arch Intern Med 2004, V164(3), P249
- (112) Mason, E; Surg Clin North Am 1967, V47(6), P1345 MEDLINE
- (113) Mattes, R; Physiol Behav 2000, V71(1-2), P87 MEDLINE
- (114) McCarty, M; Med Hypotheses 1998, V51(6), P451 HCAPLUS
- (115) McDuffie, J; Pharmacotherapy 2002, V22(7), P814 HCAPLUS
- (116) McMahon, F; Arch Intern Med 2000, V160, P2185 HCAPLUS
- (117) Morrison, M; J Appl Physiol 2000, V89(2), P549 HCAPLUS
- (118) Muls, E; Int J Obes Relat Metab Disord 2001, V25, P1713 HCAPLUS
- (119) Nagao, K; Biochem Biophys Res Commun 2003, V306(1), P134 HCAPLUS
- (120) Nagao, K; Biochem Biophys Res Commun 2003, V310(2), P562 HCAPLUS
- (121) Nagele, H; Eur J Clin Pharmacol 1999, V55, P667 HCAPLUS
- (122) Nageswara, R; Nutr Res 1988, V8, P209
- (123) Ntambi, J; Can J Appl Physiol 2002, V27(6), P617 HCAPLUS
- (124) Ogden, C; Endocrinol Metab Clin North Am 2003, V32(4), P741
- (125) O'Brien, K; American Heart Association's Scientific Sessions 2002 on Tuesday, Abstract ID, 117597 2002
- (126) O'Keefe, J; Mayo Clin Proc 2004, V79(1), P101
- (127) Piers, L; Int J Obes Relat Metab Disord 2002, V26(6), P814 HCAPLUS
- (128) Pinkney, J; Obes Rev 2004, V5(1), P69 MEDLINE
- (129) Pittler, M; Int J Obes Relat Metab Disord 2003, V27(4), P522 HCAPLUS
- (130) Poehlman, E; Biol Sci Med Sci 2001, V56, P45
- (131) Raynor, H; Appetite 2003, V40(1), P15
- (132) Reaven, G; Curr Atheroscler Rep 2000, V2(6), P503 MEDLINE
- (133) Reaven, G; Curr Atheroscler Rep 2000, V2(6), P503 MEDLINE
- (134) Reaven, G; Curr Opin Lipidol 1997, V8(1), P23 HCAPLUS
- (135) Reaven, G; Curr Opin Lipidol 1997, V8(1), P23 HCAPLUS
- (136) Ren, C; Obes Surg 2000, V10(514), PE523
- (137) Roberts, S; Diabetes Forecast 2002, V55(8), P98
- (138) Rolls, B; Am J Clin Nutr 2000, V72(2), P361 HCAPLUS
- (139) Rolls, B; Obes Res 1998, V6, P1 HCAPLUS
- (140) Samaha, F; N Engl J Med 2003, V348(21), P2074 HCAPLUS
- (141) Santa-Clara, H; 2003, V52(11), P1413 HCAPLUS

- (142) Schaneberg, B; Phytochemistry 2003, P911 HCAPLUS
- (143) Schulman, S; Public Health Rep 2003, V118(6), P487
- (144) Scopinaro, N; Surgery 1996, V119(3), P261 MEDLINE
- (145) Seagle, H; Obes Res 1998, V6, P115 HCAPLUS
- (146) Shekelle, P; Contract No 290-97-0001 2003
- (147) Sjostrom, L; Lancet 1998, V352, P167 HCAPLUS
- (148) Smedman, A; Lipids 2001, V36(8), P773 HCAPLUS
- (149) Speetjens, J; Chem Res Toxicol 1999, V12(6), P483 HCAPLUS
- (150) Stanko, R; Am J Clin Nutr 1994, V59(2), P423 MEDLINE
- (151) Stanko, R; Cancer Res 1994, V54(4), P1004 HCAPLUS
- (152) Stanko, R; Int J Obes Relat Metab Disord 1996, V20(10), P925 HCAPLUS
- (153) Stanko, R; Metabolism 1995, V44(2), P166 HCAPLUS
- (154) Stearns, D; FASEB J 1995, V9(15), P1643 HCAPLUS
- (155) Stearns, D; Mutat Res 2002, V15(5131-2), P135
- (156) Stryer, L; Biochemistry 1988
- (157) Suen, V; Nutrition 2003, V19(9), P703 HCAPLUS
- (158) Sullivan, A; Lipids 1973, V9, P129
- (159) Takahashi, Y; Comp Biochem Physiol B Biochem Mol Biol 2002, V133(3), P395
- (160) Terpstra, A; J Nutr 2001, V131(7), P2067 HCAPLUS
- (161) Thom, E; Int J Obes 1996, V20(Suppl 4), P48
- (162) Torgerson, J; Diabetes Care 2004, V27(1), P155 HCAPLUS
- (163) van Gaal, L; Int J Obes Relat Metab Disord 1998, V22(Suppl 1), PS38
- (164) van Hout, G; Obes Surg 2003, V13(6), P926
- (165) van Loon, L; Am J Clin Nutr 2000, V72(6), P1445 HCAPLUS
- (166) Vincent, J; Sports Med 2003, V33(3), P213
- (167) Vuori, I; Public Health Nutr 2001, V4(2B), P517 MEDLINE
- (168) Wadden, T; Obes Res 2000, V8, P431 HCAPLUS
- (169) Wang, L; J Am Geriatr Soc 2002, V50(9), P1525
- (170) Watson, J; Arch Biochem Biophys 1969, V35, P209
- (171) Watson, J; J Biol Chem 1970, V245, P5993 HCAPLUS
- (172) Weissman, N; Am J Med Sci 2001, V21, P285
- (173) West, D; Scimeca, J Am J Physiol 1998, V275(3 Pt 2), PR667 MEDLINE
- (174) Westerterp-Plantenga, M; Int J Obes Relat Metab Disord 2002, V26(6), P870 HCAPLUS
- (175) Willett, W; Obes Rev 2002, V3(2), P59 HCAPLUS
- (176) Willey, K; Diabetes Care 2003, V26(5), P1580
- (177) Zambell, K; Expenditure 2000, V35(7), P777 HCAPLUS
- (178) Zanni, E; J Lipid Res 1987, V28(5), P518 HCAPLUS
- (179) Zhang, Q; Soc Sci Med 2004, V58(6), P1171
- (180) Zhi, J; Clin Pharmacol 1995, V35, P1103 HCAPLUS

L66 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:876469 HCAPLUS

DN 141:325728

ED Entered STN: 22 Oct 2004

TI Conjugated fatty acids as **hypertension** preventive medicines and health foods

IN Kametani, Takeshi; Iwata, Toshio; Yamamoto, Takaya; Yanagida, Akiyoshi; Nagao, Koji

PA Rinoru Oil Mills Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K0031-201

ICS A23K0001-16; A23L0001-30; A61K0031-231; A61P0001-02; A61P0001-04; A61P0001-14; A61P0001-16; A61P0003-04; A61P0003-06; A61P0003-10; A61P0009-10; A61P0009-12; A61P0011-00; A61P0013-12; A61P0019-06; A61P0019-10; A61P0025-20; A61P0025-32; A61P0025-34

CC 1-8 (Pharmacology)

Section cross-reference(s): 17, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004292421	A2	20041021	JP 2003-191299	20030703
	EP 1493440	A1	20050105	EP 2004-13770	20040611
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	US 2005002991	A1	20050106	US 2004-866822	20040615
PRAI	JP 2003-30088	A	20030206		
	JP 2003-191299	A	20030703		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2004292421	ICM	A61K0031-201
	ICS	A23K0001-16; A23L0001-30; A61K0031-231; A61P0001-02; A61P0001-04; A61P0001-14; A61P0001-16; A61P0003-04; A61P0003-06; A61P0003-10; A61P0009-10; A61P0009-12; A61P0011-00; A61P0013-12; A61P0019-06; A61P0019-10; A61P0025-20; A61P0025-32; A61P0025-34
	IPCI	A61K0031-201 [ICM,7]; A23K0001-16 [ICS,7]; A23L0001-30 [ICS,7]; A61K0031-231 [ICS,7]; A61P0001-02 [ICS,7]; A61P0001-04 [ICS,7]; A61P0001-14 [ICS,7]; A61P0001-16 [ICS,7]; A61P0003-04 [ICS,7]; A61P0003-06 [ICS,7]; A61P0003-10 [ICS,7]; A61P0009-10 [ICS,7]; A61P0009-12 [ICS,7]; A61P0011-00 [ICS,7]; A61P0013-12 [ICS,7]; A61P0019-06 [ICS,7]; A61P0019-10 [ICS,7]; A61P0025-20 [ICS,7]; A61P0025-32 [ICS,7]; A61P0025-34 [ICS,7]; A61P0035-00 [ICS,7]
	FTERM	2B150/AB20; 2B150/DA37; 4B018/MD10; 4B018/ME04; 4C206/AA01; 4C206/AA02; 4C206/DA04; 4C206/DB07; 4C206/DB41; 4C206/DB44; 4C206/DB47; 4C206/DB48; 4C206/MA01; 4C206/MA72; 4C206/NA14; 4C206/ZA05; 4C206/ZA36; 4C206/ZA40; 4C206/ZA42; 4C206/ZA45; 4C206/ZA59; 4C206/ZA66; 4C206/ZA67; 4C206/ZA68; 4C206/ZA70; 4C206/ZA75; 4C206/ZA81; 4C206/ZA96; 4C206/ZA97; 4C206/ZB26; 4C206/ZC33; 4C206/ZC35; 4C206/ZC39
EP 1493440	IPCI	A61K0031-20 [ICM,7]; A23L0001-24 [ICS,7]; A23L0001-30 [ICS,7]; A61P0009-00 [ICS,7]
	ECLA	A23K001/16I; A23L001/24; A23L001/30C2; A61K031/20
US 2005002991	IPCI	A61K0031-202 [ICM,7]
	NCL	424/439.000
	ECLA	A23K001/16I; A23L001/24; A23L001/30C2; A61K031/20

AB **Conjugated fatty acids**, including **conjugated linoleic acid**, and their salts and esters are claimed as **hypertension** preventive medicines, feeds, and health foods and drinks. Formulation examples of tablets were given.

ST **hypertension** fatty acid health food

IT **Antihypertensives**

Feed

Health food

Hypertension

(conjugated fatty acids as **hypertension** preventive medicines and health foods)

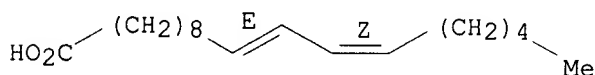
IT Fatty acids, biological studies

RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(conjugated fatty acids as **hypertension** preventive medicines)

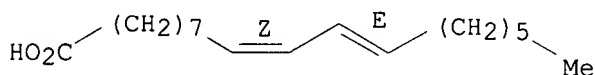
- and health foods)
- IT Beverages
(health; conjugated fatty acids as **hypertension** preventive medicines and health foods)
- IT Drug delivery systems
(tablets; conjugated fatty acids as **hypertension** preventive medicines and health foods)
- IT **2420-56-6P, 10-trans, 12-cis-Linoleic acid**
2540-56-9P, 9-cis, 11-trans-Linoleic acid
RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**conjugated fatty acids as hypertension** preventive medicines and health foods)
- IT **60-33-3, Linoleic acid**, biological studies
RL: PAC (Pharmacological activity); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(**conjugated fatty acids as hypertension** preventive medicines and health foods)
- IT 9001-62-1, Lipase
RL: RCT (Reactant); RACT (Reactant or reagent)
(conjugated fatty acids as **hypertension** preventive medicines and health foods)
- IT **2420-56-6P, 10-trans, 12-cis-Linoleic acid**
2540-56-9P, 9-cis, 11-trans-Linoleic acid
RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**conjugated fatty acids as hypertension** preventive medicines and health foods)
- RN 2420-56-6 HCAPLUS
CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



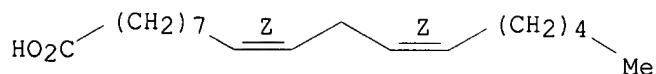
- RN 2540-56-9 HCAPLUS
CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



- IT **60-33-3, Linoleic acid**, biological studies
RL: PAC (Pharmacological activity); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(**conjugated fatty acids as hypertension** preventive medicines and health foods)
- RN 60-33-3 HCAPLUS
CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



- L66 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:748975 HCAPLUS
 DN 141:259891
 ED Entered STN: 14 Sep 2004
 TI **Conjugated linoleic acid** prevents the development of essential **hypertension** in spontaneously hypertensive rats
 AU Inoue, Nao; Nagao, Koji; Hirata, Junichi; Wang, Yu-Ming; Yanagita, Teruyoshi
 CS Department of Applied Biological Sciences, Laboratory of Nutrition Biochemistry, Saga University, Saga, 840-8502, Japan
 SO Biochemical and Biophysical Research Communications (2004), 323(2), 679-684
 CODEN: BBRCA9; ISSN: 0006-291X
 PB Elsevier
 DT Journal
 LA English
 CC 18-5 (Animal Nutrition)
 Section cross-reference(s): 14
 AB **Conjugated linoleic acid (CLA)** is a mixture of positional and geometric isomers of **linoleic acid** found in beef and lamb meat and in dairy products. **CLA** has attracted considerable attention because of potential beneficial biol. effects, including protective effects against several cancers, atherosclerosis, and obesity. Dietary **CLA** could prevent the development of obesity-related **hypertension** in obese animals. In this study, **CLA** (isomer mixture) suppressed the development of non-obese essential **hypertension** in spontaneously hypertensive rats (SHR). After 4 wk of feeding **CLA**, the increase in systolic **blood pressure** was suppressed compared with rats fed linoleic acid. Abdominal adipose tissue weight was also decreased in **CLA**-fed SHR. The contents of arachidonic acid (substrate of eicosanoids production) were not changed, but accumulation of oleic acid, (lipogenesis end-product) was markedly decreased in erythrocyte membrane phospholipids of **CLA**-fed SHR. There were increased levels of blood plasma adiponectin, suggested as a regulatory factor of **hypertension** via enhanced mRNA expression in **CLA**-fed SHR. The **antihypertensive** effects of dietary **CLA** may be due to increased blood plasma adiponectin levels and may be associated with alleviation of erythrocyte membrane abnormalities in SHR.
 ST nutrition **conjugated linoleic acid**
hypertension erythrocyte phospholipid fatty acid
 IT Cytokines
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (adiponectin; dietary **conjugated linoleic acid** prevents development of essential **hypertension** in spontaneously hypertensive rats)
 IT Erythrocyte
 (cell membrane; dietary **conjugated linoleic acid** prevents development of essential **hypertension** in spontaneously hypertensive rats)
 IT Adipose tissue
 Blood plasma

Blood pressure

Nutrition, animal

(dietary **conjugated linoleic acid**
prevents development of essential **hypertension** in
spontaneously hypertensive rats)

IT Phospholipids, biological studies

mRNA

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(dietary **conjugated linoleic acid**
prevents development of essential **hypertension** in
spontaneously hypertensive rats)

IT Fatty acids, biological studies

RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL
(Biological study); USES (Uses)

(dietary **conjugated linoleic acid**
prevents development of essential **hypertension** in
spontaneously hypertensive rats)

IT Cell membrane

(erythrocyte; dietary **conjugated linoleic**
acid prevents development of essential **hypertension**
in spontaneously hypertensive rats)

IT **Hypertension**

(spontaneous; dietary **conjugated linoleic**
acid prevents development of **essential**
hypertension in spontaneously hypertensive rats)

IT 57-10-3, Hexadecanoic **acid**, biological studies 57-11-4,
Octadecanoic **acid**, biological studies 544-63-8, Tetradecanoic
acid, biological studies 9014-34-0 27104-13-8 28039-99-8
28984-77-2 31152-45-1 32839-18-2 32839-34-2 81276-10-0

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(dietary **conjugated linoleic acid**
prevents development of essential **hypertension** in
spontaneously hypertensive rats)

IT **121250-47-3, Conjugated linoleic acid**

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(dietary **conjugated linoleic acid**
prevents development of essential **hypertension** in
spontaneously hypertensive rats)

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Adamczak, M; Am J Hypertens 2003, V16, P72 HCAPLUS
- (2) Arita, Y; Biochem Biophys Res Commun 1999, V257, P79 HCAPLUS
- (3) Arita, Y; Circulation 2002, V105, P2893 HCAPLUS
- (4) Bellenger, J; FASEB J 2004, V18, P773 MEDLINE
- (5) Bellenger-Germain, S; Lipids 2002, V37, P561 HCAPLUS
- (6) Bonaa, K; N Engl J Med 1990, V322, P795 MEDLINE
- (7) Choi, Y; Biochem Biophys Res Commun 2001, V284, P689 HCAPLUS
- (8) Folch, J; J Biol Chem 1957, V226, P497 MEDLINE
- (9) Gaullier, J; Am J Clin Nutr 2004, V79, P1118 HCAPLUS
- (10) Houseknecht, K; Biochem Biophys Res Commun 1998, V244, P678 HCAPLUS
- (11) Ip, C; Cancer 1994, V74, P1050 MEDLINE
- (12) Iwashima, Y; Hypertension 2004, V43, P1318 HCAPLUS
- (13) Kazumi, T; Diabetes Care 2002, V25, P971
- (14) Knapp, H; N Engl J Med 1989, V320, P1037 HCAPLUS
- (15) Lee, K; Atherosclerosis 1994, V108, P19 HCAPLUS
- (16) Lee, K; Biochem Biophys Res Commun 1998, V248, P817 HCAPLUS
- (17) Liel, N; Thromb Res 1993, V70, P205 MEDLINE
- (18) Lin, X; J Nutr 2004, V134, P1362 HCAPLUS
- (19) Maeda, N; Diabetes 2001, V50, P2094 HCAPLUS
- (20) Maeda, N; Nat Med 2002, V8, P731 HCAPLUS

- (21) Nagao, K; Biochem Biophys Res Commun 2003, V306, P134 HCAPLUS
- (22) Nagao, K; Biochem Biophys Res Commun 2003, V310, P562 HCAPLUS
- (23) Nagao, K; Nutrition 2003, V19, P652 HCAPLUS
- (24) Narce, M; Prostaglandins Leukot Essent Fatty Acids 1995, V53, P59 HCAPLUS
- (25) Ouchi, N; Circulation 1999, V100, P2473 HCAPLUS
- (26) Ouchi, N; Circulation 2000, V102, P1296 HCAPLUS
- (27) Ouchi, N; Circulation 2001, V103, P1057 HCAPLUS
- (28) Ouchi, N; Hypertension 2003, V42, P231 HCAPLUS
- (29) Park, Y; Biochem Biophys Acta 2000, V1486, P285 HCAPLUS
- (30) Peters, R; J Am Acad Nurse Pract 2003, V15, P56
- (31) Ryder, J; Diabetes 2001, V50, P1149 HCAPLUS
- (32) Smih, S; J Anim Sci 2002, V80, P2110
- (33) Smith, E; Eicosanoids 1989, V2, P199 HCAPLUS
- (34) Staessen, J; Lancet 2000, V355, P865 MEDLINE
- (35) Staessen, J; Lancet 2003, V361, P1629
- (36) Yin, K; Br J Pharmacol 1991, V102, P991 HCAPLUS

IT 121250-47-3, **Conjugated linoleic acid**

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(dietary **conjugated linoleic acid**

prevents development of essential **hypertension** in
spontaneously hypertensive rats)

RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO₂C-(CH₂)₁₆-Me

L66 ANSWER 11 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:448966 HCAPLUS

DN 141:37746

ED Entered STN: 03 Jun 2004

TI Regulatory issues related to functional foods and natural health products
in Canada: Possible implications for manufacturers of **conjugated**
linoleic acid

AU Fitzpatrick, Kelley C.

CS Richardson Centre for Functional Foods & Nutraceuticals, University of
Manitoba, Winnipeg, MB, R3T 2N2, Can.

SO American Journal of Clinical Nutrition (2004), 79(6S), 1217S-1220S
CODEN: AJCNAC; ISSN: 0002-9165

PB American Society for Clinical Nutrition

DT Journal

LA English

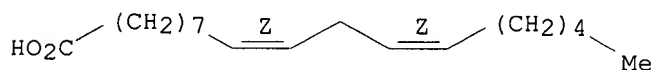
CC 17-2 (Food and Feed Chemistry)

AB The Canadian Food and Drugs Act and Regulations, through its definitions
of food and drug, currently restricts health-related claims for foods,
food ingredients, and natural health products (NHPs). Over the past few
decades, scientific research has led to a large body of information that
demonstrates the benefits for health of many food and NHP ingredients.
Health Canada recognized the constraints of the current regulatory
environment and started to develop regulations related to the allowance of
health claims for functional foods and NHPs, including those foods and
NHPs that would contain **conjugated linoleic**
acid isomers. Health Canada has 3 initiatives under way in the

area of health claims for foods: (1) to adopt the generic health claims of the United States within a Canadian context, (2) to develop scientific stds. of evidence and a guidance document for supporting the validity of product-specific claims, and (3) to develop an overall regulatory framework for functional foods. In 2000, Health Canada announced approval for the use of 5 generic diet-related health claims: Na and **hypertension**, Ca and osteoporosis, saturated and trans fat and cholesterol and coronary artery disease, fruits and vegetables and cancer, and sugar alcs. and dental caries. Under a sep. initiative, Natural Health Products Regulations were published in the Canada Gazette Part II on June 18, 2003. The NHP Regulations came into force on Jan. 1, 2004, with a transition period ranging from 2 y (for site licensing) to 6 y (for product licensing, for products already issued a drug identification number).

ST functional food natural product **conjugated linoleic acid** regulation
 IT Health food
 Public health
 Standards, legal and permissive
 (regulations of functional foods and natural health products in Canada)
 IT Natural products
 RL: BUU (Biological use, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 (regulations of functional foods and natural health products in Canada)
 IT Diet
 (supplements; regulations of functional foods and natural health products in Canada)
 IT **60-33-3D, Linoleic acid, conjugated**
 RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 (regulations of functional foods and natural health products in Canada)
 RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Ferrier, G; Nutr Bus J 2002, V3, P3
 (2) Health Canada; <http://canadagazette.gc.ca/partI/2001/20011222/pdf/g1-13551.pdf> 2001
 (3) Health Canada; <http://canadagazette.gc.ca/partII/2003/20030101/pdf/g2-13701.pdf> 2003
 (4) Health Canada; <http://canadagazette.gc.ca/partII/2003/20030618/html/sor196-e.html> 2003
 (5) Health Canada; http://www.hc-sc.ca/food-aliment/english/subjects/health_claims 2001
 (6) Health Canada; http://www.hc-sc.ca/food-aliment/english/subjects/health_claims/standards_of_evidence 2000
 (7) Health Canada; <http://www.hc-sc.ca/hpb-dgps/therapeut/htmleng/ffn.html> 1998
 (8) Health Canada; http://www.hc-sc.gc.ca/hpfb-dgpsa/sched_a_review_e.html 2003
 (9) Singer, Z; Fortified juice must be sold as a drug in Canada 1999, P37
 IT **60-33-3D, Linoleic acid, conjugated**
 RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 (regulations of functional foods and natural health products in Canada)
 RN 60-33-3 HCAPLUS
 CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L66 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:448957 HCAPLUS
 DN 141:190071
 ED Entered STN: 03 Jun 2004
 TI Insulin resistance-associated cardiovascular disease: Potential benefits
 of **conjugated linoleic acid**
 AU Aminot-Gilchrist, Denise V.; Anderson, Hope D. I.
 CS Can.
 SO American Journal of Clinical Nutrition (2004), 79(6S), 1159S-1163S
 CODEN: AJCNAC; ISSN: 0002-9165
 PB American Society for Clinical Nutrition
 DT Journal; General Review
 LA English
 CC 18-0 (Animal Nutrition)
 Section cross-reference(s): 14
 AB A review. Type 2 diabetes mellitus and associated cardiovascular disease
 have reached global epidemic proportions. Recent data from the World
 Health Organization (WHO) Multinational Study of Vascular Disease in
 Diabetes indicate that cardiovascular disease is the leading cause of
 mortality (52% of deaths) in individuals with type 2 diabetes mellitus.
 Although insulin resistance plays a critical role in the pathogenesis of type
 2 diabetes-related cardiovascular disease, other related risk factors
 often cluster in a single patient; the combinations of insulin resistance
 and these risk factors are known as the metabolic syndrome. According to
 the WHO definition, this constellation of risk factors includes
hypertension, elevated blood plasma triacylglycerol, decreased
 HDL-cholesterol, central obesity, and microalbuminuria. The Multiple Risk
 Factor Intervention Trial showed that, although diabetes and insulin
 resistance are independent risk factors for cardiovascular disease
 mortality, these other components of the metabolic syndrome confer
 additive risk. Thus, to effectively address cardiovascular disease in
 persons with diabetes, intervention should target all these factors.
Conjugated linoleic acid (CLA) could
 be a candidate agent. The therapeutic potential of dietary **CLA**
 against insulin resistance-associated cardiovascular disease is discussed on
 the basis of reported **CLA** effects on individual components of
 the metabolic syndrome.
 ST review **conjugated linoleic acid** metabolic
 syndrome diabetes cardiovascular disease
 IT Cardiovascular system, disease
 Human
 Nutrition, animal
 (dietary **conjugated linoleic acid**
 implications for insulin resistance, type 2 diabetes mellitus,
 metabolic syndrome and cardiovascular disease in humans)
 IT Disease, animal
 (metabolic syndrome X; dietary **conjugated linoleic**
acid implications for insulin resistance, type 2 diabetes
 mellitus, metabolic syndrome and cardiovascular disease in humans)
 IT Diabetes mellitus
 (non-insulin-dependent; dietary **conjugated linoleic**
acid implications for insulin resistance, type 2 diabetes
 mellitus, metabolic syndrome and cardiovascular disease in humans)
 IT 9004-10-8, Insulin, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (dietary **conjugated linoleic acid**
 implications for insulin resistance, type 2 diabetes mellitus,
 metabolic syndrome and cardiovascular disease in humans)
 IT 121250-47-3, **Conjugated linoleic acid**

RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL
(Biological study); USES (Uses)
(dietary **conjugated linoleic acid**
implications for insulin resistance, type 2 diabetes mellitus,
metabolic syndrome and cardiovascular disease in humans)

RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Anderson, R; Diabetes 1997, V46, P1786 HCAPLUS
- (2) Balon, T; Am J Physiol 1995, V269, PE745 HCAPLUS
- (3) Balon, T; Hypertension 1994, V23, P1036 MEDLINE
- (4) Belury, M; J Nutr 2003, V133, P257S
- (5) Braaten, J; Diabet Med 1994, V11, P312 MEDLINE
- (6) Broadhurst, C; J Agric Food Chem 2000, V48, P849 HCAPLUS
- (7) Eisenberg, D; N Engl J Med 1993, V328, P246 MEDLINE
- (8) Evans, M; J Nutr Biochem 2002, V13, P508 HCAPLUS
- (9) Fontbonne, A; Diabetes Care 1991, V14, P461 MEDLINE
- (10) Gavino, V; J Nutr 2000, V130, P27 HCAPLUS
- (11) Grundy, S; J Lipid Res 1990, V31, P1149 HCAPLUS
- (12) Houseknecht, K; Biochem Biophys Res Comm 1998, V244, P678 HCAPLUS
- (13) Isomaa, B; Diabetes Care 2001, V24, P683 MEDLINE
- (14) Kirpichnikov, D; Trends Endocrinol Metab 2001, V12, P225 HCAPLUS
- (15) Lee, K; Atherosclerosis 1994, V08, P19
- (16) Li, S; Crit Rev Food Sci Nutr 2001, V41, P451 MEDLINE
- (17) Ludvik, B; Diabetes Care 2002, V25, P239
- (18) Marles, R; Econ Med Plant Res 1994, V6, P149 HCAPLUS
- (19) Morrish, N; Diabetologia 2001, V44, PS14
- (20) Noone, E; Br J Nutr 2002, V88, P243 HCAPLUS
- (21) Pariza, M; Proc Soc Exp Biol Med 2000, V223, P8 HCAPLUS
- (22) Park, Y; Lipids 1997, V32, P853 HCAPLUS
- (23) Parodi, P; Aust J Dairy Technol 1994, V49, P93 HCAPLUS
- (24) Pick, M; J Am Diet Assoc 1996, V96, P1254 MEDLINE
- (25) Prasad, K; J Lab Clin Med 2001, V138, P32 HCAPLUS
- (26) Reusch, J; Am J Cardiol 2002, V90(suppl), P19G
- (27) Riserus, U; Diabetes Care 2002, V25, P1516 HCAPLUS
- (28) Riserus, U; Int J Obes Relat Metab Disord 2001, V25, P1129 HCAPLUS
- (29) Ryder, J; Diabetes 2001, V50, P1149 HCAPLUS
- (30) Smedman, A; Lipids 2001, V36, P773 HCAPLUS
- (31) Stamler, J; Diabetes Care 1993, V16, P434 MEDLINE
- (32) Tuomilehto, J; N Engl J Med 2001, V344, P1343 MEDLINE
- (33) UK Prospective Diabetes Study Group; BMJ 1998, V317, P703
- (34) Verma, S; J Am Coll Nutr 1998, V17, P11 HCAPLUS
- (35) Vuksan, V; J Am Coll Nutr 2000, V19, P738 MEDLINE
- (36) Yeung, C; Br J Nutr 2000, V84, P935 HCAPLUS
- (37) Yotsumoto, H; Food Res Int 1999, V31, P403
- (38) Zimmet, P; Nature 2001, V414, P782 HCAPLUS
- (39) Zimmet, P; Trends Cardiovasc Med 2002, V12, P354 HCAPLUS

IT 121250-47-3, **Conjugated linoleic acid**

RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL
(Biological study); USES (Uses)
(dietary **conjugated linoleic acid**
implications for insulin resistance, type 2 diabetes mellitus,
metabolic syndrome and cardiovascular disease in humans)

RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO₂C- (CH₂)₁₆-Me

L66 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:344020 HCAPLUS
DN 141:6245
ED Entered STN: 28 Apr 2004
TI Physiological functions of **conjugated linoleic acid**
AU Nagao, Koji; Yanagita, Teruyoshi
CS Fac. Agric., Saga Univ., Saga, 840-8502, Japan
SO Nippon Eiyo, Shokuryo Gakkaishi (2004), 57(2), 105-109
CODEN: NESGDC; ISSN: 0287-3516
PB Nippon Eiyo, Shokuryo Gakkai
DT Journal; General Review
LA Japanese
CC 18-0 (Animal Nutrition)
AB A review. **Conjugated linoleic acids (CLAs)** are a mixture of positional and geometric isomers of **linoleic acid**, which are found preferentially in dairy products and meats. Reported data indicate to have potent beneficial effects, including antitumor, antiobese, antiatherogenic, and antidiabetic activities. The mols. have also been shown to prevent the onset of **hypertension**. The recent reports suggest that each isomer of **CLAs** has different functions, for example 10 trans, 12 cis-**CLA** has anticarcinogenic, antiobese and antidiabetic effects, whereas 9 cis, 11 trans-**CLA** exerts for anticancer effect. It is interesting to know the **CLA** effect on human beings. However, so far as we know, it is scarce on human data and the reported data on antiobese effect is still controversial. More detailed research on the species difference of responsiveness to dietary **CLA** would be required.
ST review conjugated linoleate nutrition
IT Human
Nutrition, animal
(nutritional and physiol. functions of **conjugated linoleic acid**)
IT 121250-47-3, **Conjugated linoleic acid**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(nutritional and physiol. functions of **conjugated linoleic acid**)
IT 121250-47-3, **Conjugated linoleic acid**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(nutritional and physiol. functions of **conjugated linoleic acid**)
RN 121250-47-3 HCAPLUS
CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4
CMF C18 H36 O2

HO₂C- (CH₂)₁₆-Me

L66 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:165494 HCAPLUS
 DN 140:405665
 ED Entered STN: 01 Mar 2004
 TI Milk beyond food
 AU Sharma, R. S.
 CS SMC College of Dairy Science, Anand, 388 110, India
 SO Indian Journal of Agriculture, Environment & Bio-Technology (2003), 1(1),
 1-22
 CODEN: IJAECV
 PB Indian Society of Agricultural Chemists
 DT Journal; General Review
 LA English
 CC 17-0 (Food and Feed Chemistry)
 Section cross-reference(s): 18
 AB A review. Infancy is the only period of the life when one food is
 expected to provide the whole nutrition as well as to ensure protection
 against infection. For the mammalian species, the nature has devised an
 individual fluid food the milk which fulfill the requirement of energy and
 nutrients till the individual grows gradually and learns to be independent
 of such maternal support partially and completely. The milk of individual
 mammalian species is so designed that the major vital constituents like
 fat, protein, carbohydrates, vitamins and minerals are varied in level
 from species to species as per the requirement of their offspring. Man is
 the only species to use the milk of other mammals as food for adults and,
 in a modified form for its own infants. This is because milk is exclusive
 source of nutrients for young and a high grade source of dietary nitrogen
 and essential amino acids for adults. Being recognized as the most
 wholesome and complete single food available in nature, the World Health
 Organization has also earmarked consumption of 220 g of milk per day per
 person. Besides the primary role of milk to provide enough nutrients, the
 recent advances in food and nutrition sciences now support the concept the
 diet may have significant role to play in modulation of various function
 in body.
 ST review milk functional food natural pharmaceutical nutrition
 IT Chelating agents
 (metal; milk as daily food with functional and pharmaceutical
 properties)
 IT Anticoagulants
Antihypertensives
 Antimicrobial agents
 Health food
 Human
 Immunomodulators
 Milk
 Nutrients
 Nutrition, animal
 (milk as daily food with functional and pharmaceutical properties)
 IT Caseins, biological studies
 Natural products, pharmaceutical
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (milk as daily food with functional and pharmaceutical properties)
 IT Albumins, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (serum; milk as daily food with functional and pharmaceutical
 properties)
 IT Lactalbumins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (α -; milk as daily food with functional and pharmaceutical
 properties)

IT Lactoglobulins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (β-; milk as daily food with functional and pharmaceutical
 properties)

IT **60-33-3D, Linoleic acid, conjugated**
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (milk as daily food with functional and pharmaceutical properties)

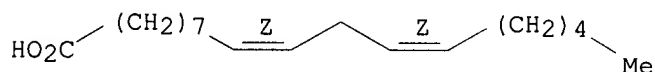
RE.CNT 81 THERE ARE 81 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Aneja, R; Indian J Dairy Sci 1990, V43, P231
- (2) Aneja, R; Nature 1991, V350, P280
- (3) Benjamin, H; FASEB J 1990, V4, PA508
- (4) Beucher, S; J Nutr Biochem 1994, V5, P578 HCAPLUS
- (5) Booth, R; Biochem J 1935, V29, P133 HCAPLUS
- (6) Bougnoux, P; Amer Oil Chem Soc Annual Meeting Abstr Health and Nutr,
 Section 3 1999, PS43
- (7) Bounous, G; Clinical and Investigative Medicine 1991, V14, P296 HCAPLUS
- (8) Chabance, B; Biochimic 1998, V80, P155 HCAPLUS
- (9) Chabance, B; Brit J Nurt 1995, V73, P582
- (10) Chin, S; 203rd National Meeting of the Americal Chemical Society, ACS
 Symposium Series 1993, V528, P262 HCAPLUS
- (11) Dhiman, T; J Dairy Sci 1999, V82, P2146 HCAPLUS
- (12) Dhiman, T; J Dairy Sci 1999, V82, P412 HCAPLUS
- (13) Dhiman, T; J Dairy Sci 2000, V83, P1016 HCAPLUS
- (14) Donovan, D; Cited from Dairy Sci Abstr 1999, V82, P57
- (15) Dormandy, T; Chem Phys Lipids 1987, V45, P353 HCAPLUS
- (16) Ebner, K; Biochem Biophys Res Communi 1966, V24, P232 HCAPLUS
- (17) Farrell, H; J Dairy Sci 2002, V85, P459 HCAPLUS
- (18) Fogerty, A; Nutr Rep Int 1988, V38, P937 HCAPLUS
- (19) Fritsche, J; Zeitschrift-fur-Lebensmittel-Untersuch-ung-Und-Forschung
 1997, V205, P415 HCAPLUS
- (20) Garcia, H; Biotechnology Letters 1998, V20, P393 HCAPLUS
- (21) Garcia, L; Chem Phy Lipids 1994, V45, P353
- (22) Gurr, M; Developments in Dairy Chemistry Vol, 2 Lipids 1982, P365
- (23) Ha, Y; Anticarcinogenesis 1987, V8, P1881 HCAPLUS
- (24) Ha, Y; Cancer Res 1990, V50, P1097 HCAPLUS
- (25) Ha, Y; J Agric Food Chem 1989, V37, P75 HCAPLUS
- (26) Hakansson, A; Proceeding of the National Academy of Sciences of the United
 States of America 1995, V92, P178064
- (27) Hata, Y; Am J Clin Nutr 1996, V64, P767 MEDLINE
- (28) Houseknecht, K; Biochem Biophys REs Comm 1998, V244, P678 HCAPLUS
- (29) Ip, C; Cancer Res 1991, V51, P6118 HCAPLUS
- (30) Ip, C; Cancer Res 1994, V54, P1212 HCAPLUS
- (31) Ip, C; J Nutr 1999, V129, P2135 HCAPLUS
- (32) Jahreis, G; Ernahrungs Umschau 1997, V44, P168 HCAPLUS
- (33) Jahreis, G; Nutr Res 1997, V17, P1479 HCAPLUS
- (34) Jenkins, T; J Dairy Sci 1993, V76, P3851 HCAPLUS
- (35) Jiang, J; J Dairy Sci 1996, V79, P438 HCAPLUS
- (36) Jolles, P; Europe J Biochem 1986, V158, P379 HCAPLUS
- (37) Kawasaki, Y; Biosci Biotech Biochem 1992, V56, P195 HCAPLUS
- (38) Kawasaki, Y; Biosci Biotech Biochem 1993, V57, P1214 HCAPLUS
- (39) Kelly, M; J Nutr 1998, V128, P881 HCAPLUS
- (40) Kepler, C; J Biol Chem 1967, V246, P2765
- (41) Knekt, P; Br J Cancer 1996, V73, P687 MEDLINE
- (42) Korhonenen, H; Int J Dairy Technol 2002, V55, P7988
- (43) Lahov, E; Fd Chern Toxic 1995, V34, P131
- (44) Lee, K; Atherosclerosis 1994, V108, P19 HCAPLUS
- (45) Maruyama, S; Agric Biol Chem 1985, V49, P1405 HCAPLUS
- (46) Masuda, O; J Nutr 1996, V126, P3063 HCAPLUS
- (47) Meisel, H; Trends in Fd Sci and Technol 1990, P41 HCAPLUS

- (48) Migliore, S; Experientia 1988, V44, P188
 (49) Murray, K; Harper's Biochemistry 24th Ed 1988
 (50) Nakamura, Y; J Dairy Sci 1995, V78, P1253 MEDLINE
 (51) Neeser, J; Infect Immunity 1998, V56, P3201
 (52) Nicolosi, R; Artery 1997, V22, P266 HCAPLUS
 (53) O'Shea, M; Int Dairy J 2000, V10, P289 HCAPLUS
 (54) Padley, F; Lipids Handbook 1994, P51
 (55) Pariza, M; Medical Oncology and Tumor Pharmacotherapy 1990, V7, P169 MEDLINE
 (56) Parodi, P; Australian J Dairy Sci 1994, V49, P93 HCAPLUS
 (57) Parodi, P; J Dairy Sci 1977, V49, P93
 (58) Passmore, R; Human Nutrition and Dietetics, 8th Ed 1986, P346
 (59) Regester, G; Mith Composition Production and Biotechnology 1997, P119 HCAPLUS
 (60) Romero, K; J Dairy Sci 2000, V83, P20
 (61) Rtel, R; J Dairy Sci 1963, V46, P102
 (62) Schlimme, E; Nahrung 1995, V39, P1 HCAPLUS
 (63) Shantha, N; J American Oil Chem Soc 1992, V69, P425 HCAPLUS
 (64) Shantha, N; J Food Sci 1995, V60, P695 HCAPLUS
 (65) Shortland, F; Nature (London) 1995, V175, P1129
 (66) Shultz, T; Cancer Lett 1992, V63, P125 HCAPLUS
 (67) Smith, I; J Dairy Sci 1954, V37, P399
 (68) Stanton, C; J Food Sci 1997, V62, P1883
 (69) Stocks, P; Ann Eugen 1933, V5, P237
 (70) Sugano, M; Lipids 1998, V33, P521 HCAPLUS
 (71) Svensson, M; J Bio Chem 1999, V274, P6388 HCAPLUS
 (72) Tanimoto, M; Biosci Biotech Biochem 1992, V56, P140 HCAPLUS
 (73) Tome, D; Am J Physiol 1987, V253, PG737 HCAPLUS
 (74) Tomita, M; J Dairy Sci 1991, V74, P4137 HCAPLUS
 (75) Walstra, P; Lipids in dairy chemistry and physics 1984, P58
 (76) West, D; J Dairy Res 1986, V53, P333 HCAPLUS
 (77) West, W; American J Physiol 1998, V275, P667
 (78) Yamamoto, N; Biosci Biotech Biochem 1994, V58, P776 HCAPLUS
 (79) Yamauchi, K; IDF Bulletin 1992, V272, P51 HCAPLUS
 (80) Yong, L; Lipids 1998, V33, P417
 (81) Yvon, M; Reprod Nutr Develop 1994, V34, P527 HCAPLUS
- IT **60-33-3D, Linoleic acid, conjugated**
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (milk as daily food with functional and pharmaceutical properties)
- RN 60-33-3 HCAPLUS
 CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L66 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN **2003:766819** HCAPLUS
 DN 139:307164
 ED Entered STN: 01 Oct 2003
 TI **Conjugated linoleic acid** enhances plasma
 adiponectin level and alleviates hyperinsulinemia and **hypertension**
 in Zucker diabetic fatty (fa/fa) rats
 AU Nagao, Koji; Inoue, Nao; Wang, Yu-Ming; Yanagita, Teruyoshi
 CS Department of Applied Biological Sciences, Laboratory of Nutrition
 Biochemistry, Saga University, Saga, 840-8502, Japan

- SO Biochemical and Biophysical Research Communications (2003), 310(2), 562-566
CODEN: BBRC9; ISSN: 0006-291X
- PB Elsevier Science
- DT Journal
- LA English
- CC 18-5 (Animal Nutrition)
Section cross-reference(s): 14
- AB Adiponectin is a hormone secreted by adipocytes which enhances insulin sensitivity. Although insulin resistance and/or compensatory hyperinsulinemia are involved in **hypertension** in obese humans, the relationships between blood plasma adiponectin levels and obesity-related **hypertension** are not clear. The effects of dietary **conjugated linoleic acid** (**CLA**, isomer mixture) as an insulin sensitizer on blood plasma adiponectin and insulin levels and on **blood pressure** were studied in Zucker diabetic fatty (ZDF) rats. During the onset of obesity, **blood pressure** increased in ZDF rats. The increase was prevented by dietary **CLA**. After 8 wk, the plasma insulin and glucose levels were also attenuated by **CLA** feeding. Dietary **CLA** increased plasma adiponectin levels in ZDF rats and the increase was attributed to the enhanced mRNA expression in the white adipose tissue. The increase may alleviate hyperinsulinemia and prevent the onset of **hypertension** in **CLA**-fed ZDF rats.
- ST nutrition **conjugated linoleic acid** blood
adiponectin hyperinsulinemia **hypertension** diabetes
- IT Cytokines
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(adiponectin; dietary **conjugated linoleic acid** enhances blood plasma adiponectin levels and alleviates hyperinsulinemia and **hypertension** in Zucker diabetic fatty rats)
- IT Blood plasma
Blood pressure
Diabetes mellitus
Hypertension
Nutrition, animal
Obesity
(dietary **conjugated linoleic acid** enhances blood plasma adiponectin levels and alleviates hyperinsulinemia and **hypertension** in Zucker diabetic fatty rats)
- IT mRNA
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(dietary **conjugated linoleic acid** enhances blood plasma adiponectin levels and alleviates hyperinsulinemia and **hypertension** in Zucker diabetic fatty rats)
- IT Adipose tissue
(white; dietary **conjugated linoleic acid** enhances blood plasma adiponectin levels and alleviates hyperinsulinemia and **hypertension** in Zucker diabetic fatty rats)
- IT 50-99-7, D-Glucose, biological studies 9004-10-8, Insulin, biological studies 169494-85-3, Leptin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(dietary **conjugated linoleic acid** enhances blood plasma adiponectin levels and alleviates hyperinsulinemia and **hypertension** in Zucker diabetic fatty rats)

IT 121250-47-3, **Conjugated linoleic acid**
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(dietary **conjugated linoleic acid**
enhances blood plasma adiponectin levels and alleviates
hyperinsulinemia and **hypertension** in Zucker diabetic fatty
rats)

RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Arita, Y; Biochem Biophys Res Commun 1999, V257, P79 HCAPLUS
- (2) Berg, A; Nat Med 2001, V7, P947 HCAPLUS
- (3) Biolo, G; J Hypertens 1998, V16, P1783 HCAPLUS
- (4) Chin, S; J Food Comp Anal 1992, V5, P185 HCAPLUS
- (5) Chua, S; Science 1996, V271, P994 HCAPLUS
- (6) Ferrari, P; J Hypertens 1990, V8, P491 HCAPLUS
- (7) Friedman, J; Nature 1998, V395, P763 HCAPLUS
- (8) Goldstein, B; Am J Cardiol 2002, V90, P3G HCAPLUS
- (9) Ha, Y; J Agric Food Chem 1989, V37, P75 HCAPLUS
- (10) Henriksen, E; Am J Physiol 2003, V285, PE98 HCAPLUS
- (11) Hotamisligil, G; Diabetes 1994, V43, P1271 HCAPLUS
- (12) Hotta, K; Diabetes 2001, V50, P1126 HCAPLUS
- (13) Houseknecht, K; Biochem Biophys Res Commun 1998, V244, P678 HCAPLUS
- (14) Ip, C; Cancer 1994, V74, P1050 MEDLINE
- (15) Jones, D; J Hypertens 1994, V12, P1433 MEDLINE
- (16) Kanai, H; Hypertension 1990, V16, P484 MEDLINE
- (17) Kolanowski, J; Int J Obes 1999, V23, P42
- (18) Landsberg, L; Hypertension 1992, V19, P161
- (19) Lee, K; Atherosclerosis 1994, V108, P19 HCAPLUS
- (20) Maeda, N; Diabetes 2001, V50, P2094 HCAPLUS
- (21) Massiera, F; FASEB J 2001, V15, P2727 HCAPLUS
- (22) Matsuzawa, Y; Ann NY Acad Sci 1999, V892, P146 HCAPLUS
- (23) Montan, J; Int J Obesity 2002, V26, PS28
- (24) Nagao, K; Nutrition 2003, V19, P652 HCAPLUS
- (25) Okuno, A; J Clin Invest 1998, V101, P1354 HCAPLUS
- (26) Ouchi, N; Hypertension 2003, V42, P231 HCAPLUS
- (27) Phillips, M; Nat Genet 1996, V13, P18 HCAPLUS
- (28) Redon, J; Nutr Metab Cardiovasc Dis 2001, V11, P344 HCAPLUS
- (29) Rocchini, A; Am J Hypertens 2002, V15, P50S
- (30) Ryder, J; Diabetes 2001, V50, P1149 HCAPLUS
- (31) Shimomura, I; Nat Med 1996, V2, P800 HCAPLUS
- (32) Smedman, A; Lipids 2001, V36, P773 HCAPLUS
- (33) Stepp, D; Am J Physiol 2002, V282, PH816 HCAPLUS
- (34) Steppan, C; Nature 2001, V409, P307 HCAPLUS
- (35) Viengchareum, S; FEBS Lett 2002, V532, P345
- (36) Wang, Y; J Oleo Sci 2003, V52, P121 HCAPLUS
- (37) Yamauchi, T; Nat Med 2001, V7, P941 HCAPLUS

IT 121250-47-3, **Conjugated linoleic acid**
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(dietary **conjugated linoleic acid**
enhances blood plasma adiponectin levels and alleviates
hyperinsulinemia and **hypertension** in Zucker diabetic fatty
rats)

RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO₂C- (CH₂)₁₆-Me

L66 ANSWER 16 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2003:425241 HCAPLUS
 DN 139:68473
 ED Entered STN: 04 Jun 2003
 TI The 10trans,12cis isomer of **conjugated linoleic acid** suppresses the development of **hypertension** in Otsuka Long-Evans Tokushima fatty rats
 AU Nagao, Koji; Inoue, Nao; Wang, Yu-Ming; Hirata, Junichi; Shimada, Yuji; Nagao, Toshihiro; Matsui, Toshiro; Yanagita, Teruyoshi
 CS Department of Applied Biological Sciences, Laboratory of Nutrition Biochemistry, Saga University, Saga, 840-8502, Japan
 SO Biochemical and Biophysical Research Communications (2003), 306(1), 134-138
 CODEN: BBRCA9; ISSN: 0006-291X
 PB Elsevier Science
 DT Journal
 LA English
 CC 18-5 (Animal Nutrition)
 Section cross-reference(s): 14
 AB **Conjugated linoleic acid (CLA)** is a mixture of positional and geometric isomers of **linoleic acid** found in beef and lamb meat and in dairy products. **CLA** has attracted considerable attention because of its potentially beneficial biol. effects, including protective effects against cancer, atherosclerosis, and obesity. The 10-trans,12-cis-**CLA** isomer can suppress the increases in **blood pressure** during the onset of obesity in Otsuka Long-Evans Tokushima rats. After 3 wk of feeding 10-trans,12-cis-**CLA**, the systolic **blood pressure** was lower compared with rats fed linoleic acid or 9-cis,11-trans-**CLA**. Abdominal adipose tissue weight was also lower in rats fed 10-trans,12-cis-**CLA**, but not in those fed 9-cis,11-trans-**CLA**. The relative mRNA expressions of angiotensinogen and leptin were suppressed by 10-trans,12-cis-**CLA** in the adipose tissue. The **antihypertensive** effects of 10-trans,12-cis-**CLA** may be related to the decreased secretion of hypertensive adipocytokines from the abdominal adipose tissue.
 ST nutrition **conjugated linoleic acid**
blood pressure **hypertension** angiotensinogen
 leptin
 IT Adipose tissue
Blood pressure
 Body weight
Hypertension
 Nutrition, animal
 (dietary 10-trans,12-cis and 9-cis,11-trans isomers of **conjugated linoleic acid** effects on development of **hypertension** in Otsuka Long-Evans Tokushima fatty rats)
 IT mRNA
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (dietary 10-trans,12-cis and 9-cis,11-trans isomers of **conjugated linoleic acid** effects on development of **hypertension** in Otsuka Long-Evans Tokushima fatty rats)
 IT 9015-82-1, Angiotensin converting enzyme 11002-13-4, Angiotensinogen
 169494-85-3, Leptin

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(dietary 10-trans,12-cis and 9-cis,11-trans isomers of
conjugated linoleic acid effects on
development of **hypertension** in Otsuka Long-Evans Tokushima
fatty rats)

IT 2420-56-6, 10-trans,12-cis-Octadecadienoic acid

2540-56-9, 9-,11-Octadecadienoic acid 9Z,11E

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(dietary 10-trans,12-cis and 9-cis,11-trans isomers of
conjugated linoleic acid effects on
development of **hypertension** in Otsuka Long-Evans Tokushima
fatty rats)

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Chin, S; J Food Comp Anal 1992, V5, P185 HCAPLUS
- (2) Correia, M; Hypertension 2001, V37, P936 HCAPLUS
- (3) Duncan, D; Biometrics 1955, V11, P1
- (4) Fuster, G; Methods Find Exp Clin Pharmacol 2002, V24, P253 HCAPLUS
- (5) Ha, Y; J Agric Food Chem 1989, V37, P75 HCAPLUS
- (6) Hida, K; J Lipid Res 2000, V41, P1615 HCAPLUS
- (7) Ip, C; Cancer 1994, V74, P1050 MEDLINE
- (8) Ip, C; Cancer Res 1994, V54, P1212 HCAPLUS
- (9) Jones, D; J Hypertension 1994, V12, P1433 MEDLINE
- (10) Juan, C; Biochem Biophys Res Commun 2001, V289, P1328 HCAPLUS
- (11) Kanai, H; Hypertension 1990, V16, P484 MEDLINE
- (12) Kang, K; Biochem Biophys Res Commun 2001, V287, P377 HCAPLUS
- (13) Kolanowski, J; Int J Obesity 1999, V23, P42
- (14) Lee, K; Atherosclerosis 1994, V108, P19 HCAPLUS
- (15) Massiera, F; FASEB J 2001, V15, P2727 HCAPLUS
- (16) Matsui, T; Biol Pharm Bull 2001, V23, P427
- (17) Matsui, T; J Hypertension 2002, V20, PS241
- (18) Matsuzawa, Y; Ann N Y Acad Sci 1999, V892, P146 HCAPLUS
- (19) Meng, Q; Biochem Pharmacol 1995, V50, P1445 HCAPLUS
- (20) Montan, J; Int J Obesity 2002, V26, PS28
- (21) Moran, T; Am J Physiol 1998, V274, PR618 HCAPLUS
- (22) Mougios, V; J Nutr Biochem 2001, V12, P585 HCAPLUS
- (23) Nagao, K; Nutrition (in press) 2003, V19 HCAPLUS
- (24) Nagao, T; Biosci Biotechnol Biochem (in press) 2003, V67 HCAPLUS
- (25) Park, Y; Lipids 1997, V32, P853 HCAPLUS
- (26) Park, Y; Lipids 1999, V34, P243 HCAPLUS
- (27) Rahman, S; Food Res Int 2001, V34, P515 HCAPLUS
- (28) Rahman, S; Nutrition 2001, V17, P385 HCAPLUS
- (29) Redon, J; Nutr Metab Cardiovasc Dis 2001, V11, P344 HCAPLUS
- (30) Sharma, A; J Hypertension 2001, V19, P667 HCAPLUS
- (31) Smedman, A; Lipids 2001, V36, P773 HCAPLUS
- (32) Takiguchi, S; Gene 1997, V197, P169 HCAPLUS
- (33) Thom, E; J Int Med Res 2001, V29, P392 HCAPLUS
- (34) Wang, Y; J Oleo Sci 2003, V52, P121 HCAPLUS
- (35) Wang, Y; J Oleo Sci 2003, V52, P129 HCAPLUS
- (36) Yagi, K; Hypertension 1997, V29, P728 HCAPLUS

IT 2420-56-6, 10-trans,12-cis-Octadecadienoic acid

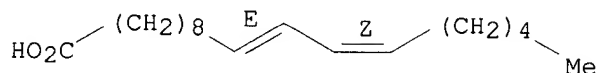
2540-56-9, 9-,11-Octadecadienoic acid 9Z,11E

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(dietary 10-trans,12-cis and 9-cis,11-trans isomers of
conjugated linoleic acid effects on
development of **hypertension** in Otsuka Long-Evans Tokushima
fatty rats)

RN 2420-56-6 HCAPLUS

CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

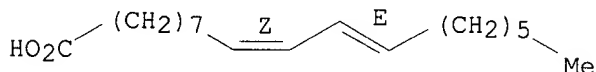
Double bond geometry as shown.



RN 2540-56-9 HCAPLUS

CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L66 ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2003:295795 HCAPLUS
 DN 139:148928
 ED Entered STN: 17 Apr 2003
 TI Effects of cis-9, trans-11 and trans-10, cis-12 **conjugated linoleic acid (CLA)** isomers on immune function in healthy men
 AU Albers, R.; van der Wielen, R. P. J.; Brink, E. J.; Hendriks, H. F. J.; Dorovska-Taran, V. N.; Mohede, I. C. M.
 CS Unilever Health Institute, Unilever Research Vlaardingen, Vlaardingen, Neth.
 SO European Journal of Clinical Nutrition (2003), 57(4), 595-603
 CODEN: EJCNEQ; ISSN: 0954-3007
 PB Nature Publishing Group
 DT Journal
 LA English
 CC 18-5 (Animal Nutrition)
 Section cross-reference(s): 15
 AB The effects of two different mixts. of the main **conjugated linoleic acid (CLA)** isomers cis-9, trans-11 **CLA** and trans-10, cis-12 **CLA** on human immune function were studied. Double-blind, randomized, parallel, reference-controlled intervention study was designed. Seventy-one healthy males aged 31-69 yr received one of the following treatments: (1) mixture of 50% c9,t11 **CLA** and 50% t10,c12 **CLA** isomers (**CLA** 50:50); (2) mixture of 80% c9,t11 **CLA** and 20% t10,c12 **CLA** isomers (**CLA** 80:20); and (3) sunflower oil fatty acids (reference). The treatments were given as supplements in softgel capsules providing a total of 1.7 g (c9,t11+t10,c12) **CLA** fatty acids (50:50) or 1.6 g (c9,t11+t10,c12) **CLA** glycerides (80:20) per day in treatment groups for 12 wk. Almost twice as many subjects reached protective antibody levels to hepatitis B when consuming CLA50:50 fatty acids (15/24, 62%) compared with subjects consuming the reference substance (7/21, 33%, P=0.075). In subjects consuming **CLA** 80:20 glycerides this was 8/22 (36%). Other aspects of immune function, ie DTH responses, NK cell activity, lymphocyte proliferation and production of TNF- α , IL1- β , IL6, IFN- γ , IL2, IL4, and PGE2, were not affected. This is the first study that suggests that **CLA** may beneficially affect the initiation of a specific response to a hepatitis B vaccination. This was seen in the **CLA** 50:50, but not in the **CLA** 80:20 group.
 ST conjugated linoleate diet immunity
 IT Antigens

- RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Hepatitis, B; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Antibodies and Immunoglobulins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(anti-hepatitis B; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Glycerides, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(blood; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Human
Immunity
(**conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Interleukin 1 β
Interleukin 2
Interleukin 4
Interleukin 6
Tumor necrosis factors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT **Blood pressure**
(diastolic; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(high-d., cholesterol of; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Allergy
(hypersensitivity, delayed-type; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(low-d., cholesterol of; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Cell proliferation
(lymphocyte; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT **Blood pressure**
(systolic; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT Interferons
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(γ ; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT 57-88-5, Cholest-5-en-3-ol (3 β)-, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(blood; **conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)
- IT 363-24-6, Prostaglandin E2 1839-11-8, **Conjugated linoleic acid** 2420-56-6, 10,12-Octadecadienoic acid, 10E, 12Z
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**conjugated linoleic acid** (**CLA**) isomers effect on immune function in healthy men)

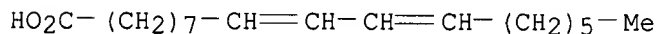
RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Banatvala, J; Vaccine 2000, V19, P877 HCAPLUS
 - (2) Bassaganya-Riera, J; J Anim Sci 2001, V79, P714 HCAPLUS
 - (3) Bassaganya-Riera, J; J Nutr 2001, V131, P2370 HCAPLUS
 - (4) Blankson, H; J Nutr 2000, V130, P2943 HCAPLUS
 - (5) Chin, S; J Nutr 1994, V124, P694 HCAPLUS
 - (6) Choi, Y; J Nutr 2000, V130, P1920 HCAPLUS
 - (7) Coates, T; Clin Ther 2001, V23, P392 HCAPLUS
 - (8) Cook, M; Poult Sci 1993, V72, P1301 HCAPLUS
 - (9) DeVoney, D; FASEB J 1999, V13, P4565
 - (10) de Deckere, E; Br J Nutr 1999, V82, P309 HCAPLUS
 - (11) Delany, J; Am J Physiol 1999, V276, PR1172 MEDLINE
 - (12) Fritsche, J; Eur J Med Res 1998, V3, P401 HCAPLUS
 - (13) Fritsche, J; Fett-Lipid 1998, V100, P190 HCAPLUS
 - (14) Fritsche, J; Z Lebensmittel-Untersuch Und-Forsch A Food Res Technol 1998, V206, P77 HCAPLUS
 - (15) Hayek, M; J Nutr 1999, V129, P32 HCAPLUS
 - (16) Houseknecht, K; Biochem Biophys Res Commun 1998, V244, P678 HCAPLUS
 - (17) Ip, C; Cancer Res 1994, V54, P1212 HCAPLUS
 - (18) Ip, C; Carcinogenesis 1997, V18, P755 HCAPLUS
 - (19) Ip, C; Nutr Cancer 1995, V24, P241 HCAPLUS
 - (20) Kelley, D; Lipids 2000, V35, P1065 HCAPLUS
 - (21) Kelley, D; Lipids 2001, V36, P669 HCAPLUS
 - (22) Kramer, J; Lipids 1998, V33, P549 HCAPLUS
 - (23) Lee, K; Atherosclerosis 1994, V108, P19 HCAPLUS
 - (24) Leroux-Roels, G; Vaccine 1994, V12, P812 HCAPLUS
 - (25) Leung, Y; J Agric Food Chem 2000, V48, P5469 HCAPLUS
 - (26) Li, Y; Lipids 1998, V33, P417 HCAPLUS
 - (27) Lin, H; J Dairy Sci 1995, V78, P2358 HCAPLUS
 - (28) Lin, Y; J Nutr Biochem 2001, V12, P183 HCAPLUS
 - (29) Liu, K; Cancer Lett 1998, V127, P15 HCAPLUS
 - (30) Miller, A; Lipids 2001, V36, P1161 HCAPLUS
 - (31) Miller, C; Biochem Biophys Res Commun 1994, V198, P1107 HCAPLUS
 - (32) Moya-Camarena, S; J Lipid Res 1999, V40, P1426 HCAPLUS
 - (33) Nicolosi, R; Artery 1997, V22, P266 HCAPLUS
 - (34) Pariza, M; Proc Soc Exp Biol Med 2000, V223, P8 HCAPLUS
 - (35) Pariza, M; Prog Lipid Res 2001, V40, P283 HCAPLUS
 - (36) Park, Y; Biochim Biophys Acta 2000, V1486, P285 HCAPLUS
 - (37) Park, Y; Lipids 1999, V34, P235 HCAPLUS
 - (38) Parodi, P; Austr J Dairy Technol 1994, V49, P93 HCAPLUS
 - (39) Peters, J; Biochim Biophys Acta 2001, V1533, P233 HCAPLUS
 - (40) Rahman, S; Nutrition 2001, V17, P385 HCAPLUS
 - (41) Sebedio, J; Biochim Biophys Acta 1997, V1345, P5 HCAPLUS
 - (42) Shantha, N; Food Chem 1993, V47, P257 HCAPLUS
 - (43) Shantha, N; J Food Sci 1995, V60, P6952
 - (44) Sugano, M; J Nutr Biochem 1997, V8, P38 HCAPLUS
 - (45) Sugano, M; Lipids 1998, V33, P521 HCAPLUS
 - (46) Thompson, H; Cancer Res 1997, V57, P5067 HCAPLUS
 - (47) Turek, J; J Nutr Biochem 1998, V9, P258 HCAPLUS
 - (48) West, D; Am J Physiol 1998, V275, PR667 HCAPLUS
 - (49) Whigham, L; Am J Physiol Regul Integr Comp Physiol 2001, V280, PR908 HCAPLUS
 - (50) Whigham, L; Am J Physiol Regul Integr Comp Physiol 2002, V280, PR1104
 - (51) Wong, M; Anticancer Res 1997, V17, P987 HCAPLUS
 - (52) Yang, M; Immunopharmacol Immunotoxicol 2000, V22, P433
- IT 1839-11-8, **Conjugated linoleic acid**
2420-56-6, 10,12-Octadecadienoic acid, 10E, 12Z
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(conjugated linoleic acid (CLA))

isomers effect on immune function in healthy men)

RN 1839-11-8 HCAPLUS

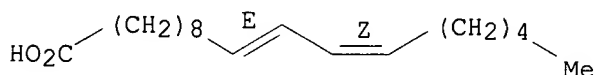
CN 9,11-Octadecadienoic acid (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 2420-56-6 HCAPLUS

CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L66 ANSWER 18 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:4170 HCAPLUS

DN 139:656

ED Entered STN: 03 Jan 2003

TI Effects of **conjugated linoleic acid** on anaphylaxis and allergic pruritus

AU Ishiguro, Kyoko; Oku, Hisae; Suitani, Akiko; Yamamoto, Yoshikuni

CS School of Pharmaceutical Sciences, Mukogawa Women's University, Nishinomiya, 663-8179, Japan

SO Biological & Pharmaceutical Bulletin (2002), 25(12), 1655-1657

CODEN: BPBLEO; ISSN: 0918-6158

PB Pharmaceutical Society of Japan

DT Journal

LA English

CC 1-9 (Pharmacology)

AB The effects of **conjugated linoleic acid** (

CLA) against anaphylaxis and allergic pruritus were investigated using a *in vivo* assay. Inhibitory effects of **CLA** were observed on the immediate (type 1) hypersensitivity reaction, with **CLA** significantly suppressing the decrease in **blood pressure** (BP) and blood flow (BF) induced by the hen egg-white lysozyme (HEL)-anaphylactic reaction in ddY mice. After oral administration, **CLA** showed antipruritic activity, with significant inhibition of scratching behavior induced by compound 48/80 (COM), a histamine-release agent. When painted onto the skin, **CLA** also inhibited COM, platelet-activating factor, and protease-induced scratching behavior, and COM-induced vasodilation of the skin. **CLA** offers promise as a drug for the treatment of allergic and inflammatory pruritus not only as an oral but also a topical agent. The present findings demonstrate that **CLA** can be effective for the prevention and treatment of allergic disease with severe pruritus.

ST **conjugated linoleic acid** antiallergy anaphylaxis pruritus

IT Allergy

Allergy inhibitors

Anaphylaxis

Antihistamines

Pruritus

(effects of **conjugated linoleic acid** on anaphylaxis and allergic pruritus)

IT 121250-47-3, **Conjugated linoleic acid**

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(effects of **conjugated linoleic acid** on
anaphylaxis and allergic pruritus)

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Abeck, D; Acta Derm Venereol 1997, V77, P449 MEDLINE
- (2) Akahoshi, A; Biosci Biotechnol Biochem 2002, V66, P916 HCAPLUS
- (3) Cook, M; Poultry Sci 1993, V72, P1301 HCAPLUS
- (4) Fukumoto, H; Phytother Res 1996, V10, P202 HCAPLUS
- (5) Goodwin, J; Clin Immunol Immunopathol 1980, V15, P106 HCAPLUS
- (6) Houseknecht, K; Biochem Biophys Res Commun 1998, V244, P678 HCAPLUS
- (7) Ishiguro, K; Biol Pharm Bull 2002, V25, P505 HCAPLUS
- (8) Ishiguro, K; Phytother Res 1997, V11, P343 HCAPLUS
- (9) Ishiguro, K; Phytother Res 1997, V11, P48
- (10) Kepler, C; J Biol Chem 1966, V241, P1350 HCAPLUS
- (11) Khosla, P; Curr Opin Lipidol 2001, V12, P31 HCAPLUS
- (12) Kohlmeier, L; Environ Health Perspect 1995, V8, P177
- (13) Lee, K; Atherosclerosis 1994, V108, P19 HCAPLUS
- (14) Liu, K; Cancer Lett 1998, V127, P15 HCAPLUS
- (15) Oku, H; Phytother Res 2001, V15, P506 MEDLINE
- (16) Pariza, M; Carcinogenesis 1986, V6, P591
- (17) Park, Y; Lipids 1997, V32, P853 HCAPLUS
- (18) Sugano, M; Lipids 1998, V33, P521 HCAPLUS
- (19) Watkins, B; J Am Coll Nutr 2000, V19, P478s HCAPLUS
- (20) Whigham, L; Am J Physiol Regul Integr Comp Physiol 2001, V280, P908
- (21) Whigham, L; Am J Physiol Regul Integr Comp Physiol 2002, V282, P1104
- (22) Wong, M; Anticancer Res 1997, V17, P987 HCAPLUS
- (23) Yamamoto, S; Monthly Book Derma 1999, V30, P25
- (24) Yamasaki, M; Biosci Biotechnol Biochem 2000, V64, P2159 HCAPLUS

IT **121250-47-3, Conjugated linoleic acid**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(effects of **conjugated linoleic acid** on
anaphylaxis and allergic pruritus)

RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO₂C-(CH₂)₁₆-Me

L66 ANSWER 19 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **2002:973882** HCAPLUS
DN 138:152676
ED Entered STN: 26 Dec 2002
TI Macronutrient innovations: the role of fats and sterols in human health
AU Li, Duo; Sinclair, Andrew J.
CS Department of Food Science, Hangzhou University of Commerce, Hangzhou,
310035, Peop. Rep. China
SO Asia Pacific Journal of Clinical Nutrition (2002), 11(Suppl.), S155-S162
CODEN: APJNFQ; ISSN: 0964-7058
PB Blackwell Publishing Asia Pty Ltd.
DT Journal; General Review

LA English
 CC 18-0 (Animal Nutrition)
 Section cross-reference(s): 14
 AB A review. Dietary intakes of fats and sterols play critical roles in human health. High proportions of saturated fats, which increase blood cholesterol levels, are mainly found in animal fats and some plant oil (cocoa butter, palm oil). The dominant polyunsatd. fatty acid (PUFA) in Western diets is linoleic acid (LA; C18:2n-6), an essential fatty acid commonly found in vegetable seed oils. This is the parent fatty acid of n-6 series of PUFA, which can be converted in vivo to C20 and C22 n-6 long-chain (LC) PUFA. The α -linolenic acid (ALA; C18:3n-3) is less abundant than LA and is another essential fatty acid. ALA is also present in some vegetable oils such as perilla, flaxseed, canola, soybean and walnut oils. ALA is the precursor of C20 and C22 n-3 LC PUFA. Sterols are widely distributed in animal and plant tissues, with cholesterol being the major sterol in animal tissue and β -sitosterol, campesterol and stigmasterol in plants. Increased dietary intakes of saturated fat and (to a lesser extent) of cholesterol, raise blood plasma or serum total and low-d. lipoprotein (LDL)-cholesterol, while PUFA decrease these levels. Plasma or serum levels of lipids and lipoprotein lipids can also be decreased by plant sterols (phytosterols) and diacylglycerols (DAG). **Conjugated linoleic acid (CLA, cis-9, trans-11-C18:2)** has some anticancer and antidiabetic activities. Fat in the DAG form has also some antiobesity effects. The n-3 PUFA have beneficial effects on increased heart rate variability, decreased risk of stroke, decrease of both systolic and diastolic **blood pressure**, and may be effective in managing depression in adults. The γ -linolenic acid (GLA) and phytosterols have anti-inflammatory activities. The GLA, when combined with docosahexaenoic acid (DHA, C22:6n-3), has beneficial effects in hyperactive children.

ST review nutrition fat fatty acid sterol biochem physiol
 IT Human
 Nutrition, animal
 (dietary fats, fatty acids and sterols role in human health and their food industrial innovations)
 IT Fats and Glyceridic oils, biological studies
 Fatty acids, biological studies
 Sterols
 RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
 (dietary fats, fatty acids and sterols role in human health and their food industrial innovations)

RE.CNT 104 THERE ARE 104 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Abeywardena, M; Am J Physiol 1991, V260, P379
- (2) Adams, P; Lipids 1996, V31, PS157 HCAPLUS
- (3) Assies, J; Biol Psychiatry 2001, V49, P510 HCAPLUS
- (4) Awad, A; J Nutr 2000, V130, P2127 HCAPLUS
- (5) Bao, D; Hypertension 1998, V32, P710 MEDLINE
- (6) Berger, A; Proc Natl Acad Sci 2001, V98, P6402 HCAPLUS
- (7) Bjerve, K; Am J Clin Nutr 1987, V46, P570 HCAPLUS
- (8) Bouic, P; Int J Sports Med 1999, V20, P258 HCAPLUS
- (9) Budowski, P; Ann Nutr Aliment 1980, V34, P389 HCAPLUS
- (10) Calder, P; Curr Opin Clin Nutr Metab Care 2001, V4, P115 HCAPLUS
- (11) Cater, N; Am J Clin Nutr 2001, V73, P41 HCAPLUS
- (12) Cave, W; Breast Cancer Res Treat 1997, V46, P239 HCAPLUS
- (13) Christensen, J; J Intern Med 2001, V249, P545 HCAPLUS
- (14) Collett, E; Am J Physiol Cell Physiol 2001, V280, P1066
- (15) Darlington, L; Br J Nutr 2001, V85, P251 HCAPLUS
- (16) De Longh, H; Bibl Nutr Dieta 1965, V7, P137

- (17) Dyerberg, J; Nutr Rev 1986, V44, P125 HCAPLUS
- (18) Fantone, J; J Immunol 1983, V130, P1495 HCAPLUS
- (19) Ferretti, A; J Nutr Biochem 1998, V9, P88 HCAPLUS
- (20) Furse, R; J Immunol 2001, V167, P490 HCAPLUS
- (21) Gallerani, M; BMJ 1995, V310, P1632 MEDLINE
- (22) Garcia, M; Phytother Res 1999, V13, P78 HCAPLUS
- (23) Gomez, M; Z Naturforsch [C] 1999, V54, P937 HCAPLUS
- (24) Gylling, H; Curr Opin Lipidol 1997, V8, P342 HCAPLUS
- (25) Ha, Y; Carcinogenesis 1987, V8, P1881 HCAPLUS
- (26) Hamberg, M; Proc Natl Acad Sci 1975, V72, P2994 HCAPLUS
- (27) Hammarstrom, S; Prog Lipid Res 1982, V20, P89
- (28) Hase, T; J Oleo Sci 2001, V50, P701 HCAPLUS
- (29) Hegsted, D; Am J Clin Nutr 1965, V17, P281 MEDLINE
- (30) Hibbeln, J; Am J Clin Nutr 1995, V62, P1 MEDLINE
- (31) Hillard, C; J Lipid Res 1997, V38, P2383 HCAPLUS
- (32) Hornstra, G; Proc Nutr Soc 1985, V44, P371 HCAPLUS
- (33) Houseknecht, K; Biochem Biophys Res Comm 1998, V244, P678 HCAPLUS
- (34) Howell, T; J Lipid Res 1998, V39, P892 HCAPLUS
- (35) Hu, F; Am J Clin Nutr 1999, V69, P890 HCAPLUS
- (36) Igarashi, M; Cancer Lett 2000, V148, P173 HCAPLUS
- (37) Ikeda, I; Biochim Biophys Acta 1983, V732, P651 HCAPLUS
- (38) Ikeda, I; Lipids 1998, V33, P897 HCAPLUS
- (39) Ip, C; Am J Clin Nutr 1997, V66, PS1523
- (40) Ip, C; Cancer Res 1991, V51, P6118 HCAPLUS
- (41) Iso, H; JAMA 2001, V285, P304 MEDLINE
- (42) James, M; Semin Arthritis Rheum 1997, V27, P85 HCAPLUS
- (43) Jarvinen, R; Br J Cancer 2001, V85, P357 HCAPLUS
- (44) Jones, P; J Lipid Res 2000, V41, P697 HCAPLUS
- (45) Jones, P; Metabolism 1998, V47, P751 HCAPLUS
- (46) Katan, M; Atherosclerosis 1995, V113, P113
- (47) Katsuragi, Y; J Oleo Sci 2001, V50, P747 HCAPLUS
- (48) Kelly, F; Eur J Clin Nutr 2001, V55, P88 HCAPLUS
- (49) Keys, A; Lancet 1957, V2, P959
- (50) Keys, A; Metabolism 1965, V14, P776 HCAPLUS
- (51) Kidd, P; Altern Med Rev 2000, V5, P402 MEDLINE
- (52) Kinsella, J; Am J Clin Nutr 1990, V52, P1 HCAPLUS
- (53) Kojima, H; Atherosclerosis 1999, V145, P389 HCAPLUS
- (54) Kraegen, E; Exp Clin Endocrinol Diabetes 2001, V109, PS189 HCAPLUS
- (55) Kris-Etherton, P; Am J Clin Nutr 1997, V65, PS1628
- (56) Kritchevsky, D; Br J Nutr 2000, V83, P459 HCAPLUS
- (57) Lands, W; Fish and Human Health 1986
- (58) Lee, J; J Nutr Sci Vitaminol (Tokyo) 1988, V34, P117 HCAPLUS
- (59) Li, D; Am J Clin Nutr 1999, V69, P872 HCAPLUS
- (60) Li, D; PhD thesis, RMIT University 1998
- (61) Liu, G; Proc Natl Acad Sci USA 2001, V98, P7510 HCAPLUS
- (62) Ma, D; J Agric Food Chem 1999, V47, P1956 HCAPLUS
- (63) MacDonald, H; J Am Coll Nutr 2000, V19, PS111
- (64) Maes, M; Psychiatry Res 1999, V85, P275 HCAPLUS
- (65) Mayatepek, E; Pediatr Res 1995, V37, P1 HCAPLUS
- (66) McCarty, M; Med Hypotheses 2000, V54, P483 HCAPLUS
- (67) McDonald, B; Am J Clin Nutr 1989, V50, P1382 HCAPLUS
- (68) Meyer, K; Diabetes Care 2001, V24, P1528 HCAPLUS
- (69) Mitropoulos, K; Arterioscler Thromb 1994, V14, P214 HCAPLUS
- (70) Moncada, S; N Engl J Med 1979, V300, P1142 HCAPLUS
- (71) Mori, T; Hypertension 1999, V34, P253 HCAPLUS
- (72) Morris, M; Circulation 1993, V88, P523 MEDLINE
- (73) Mufti, R; Psychiatr Serv 1998, V49, P221 MEDLINE
- (74) Nagao, T; J Nutr 2000, V130, P792 HCAPLUS
- (75) Nestel, P; Am J Clin Nutr 1992, V55, P46 MEDLINE
- (76) Nestel, P; J Lipid Res 1992, V33, P1029 HCAPLUS

- (77) Neuvonen, P; Eur J Clin Invest 1989, V19, P251 MEDLINE
 (78) Normen, A; Am J Clin Nutr 2001, V74, P141 HCAPLUS
 (79) Pan, X; Diabetes Care 1997, V20, P537 MEDLINE
 (80) Pariza, M; Prog Lipid Res 2001, V40, P283 HCAPLUS
 (81) Pariza, M; Toxicol Sci 1999, V52, PS107
 (82) Parodi, P; J Nutr 1997, V127, P1055 HCAPLUS
 (83) Partonen, T; Br J Psychiatry 1999, V175, P259 MEDLINE
 (84) Raz, A; Biochim Biophys Acta 1977, V488, P305 HCAPLUS
 (85) Richardson, A; Eur Neuropsychopharmacol 2000, V10, P189 HCAPLUS
 (86) Richardson, A; Prostaglandins Leukot Essent Fatty Acids 2000, V63, P79 HCAPLUS
 (87) Rothman, D; Semin Arthritis Rheum 1995, V25, P87 HCAPLUS
 (88) Salmeron, J; Am J Clin Nutr 2001, V73, P1019 HCAPLUS
 (89) Sarkkinen, E; Metabolism 1998, V47, P744 HCAPLUS
 (90) Schacky, C; J Lipid Res 1985, V26, P457
 (91) Stoll, A; Arch Gen Psychiatry 1999, V56, P407 HCAPLUS
 (92) Svaneborg, N; Lipids 1994, V29, P145 HCAPLUS
 (93) Taguchi, H; J Am Coll Nutr 2000, V19, P789 HCAPLUS
 (94) Takei, A; J Oleo Sci 2001, V50, P735 HCAPLUS
 (95) Terry, P; Lancet 2001, V357, P1764 HCAPLUS
 (96) Tholstrup, T; Am J Clin Nutr 1994, V59, P371 HCAPLUS
 (97) Tuomilehto, J; N Engl J Med 2001, V344, P1343 MEDLINE
 (98) Ulloa, N; Biochim Biophys Acta 1985, V837, P181 HCAPLUS
 (99) Weisinger, H; Nat Med 2001, V7, P258 HCAPLUS
 (100) Whigham, L; Pharmacol Res 2000, V42, P503 HCAPLUS
 (101) Yasunaga, K; 92nd AOCs Annual Meeting Abstract 2001, PS54
 (102) Zampelas, A; Eur J Clin Nutr 1994, V48, P842 MEDLINE
 (103) Ziboh, V; Am J Clin Nutr 2000, V71, PS361
 (104) Zock, P; J Lipid Res 1992, V33, P399 HCAPLUS

L66 ANSWER 20 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:428649 HCAPLUS

DN 136:400982

ED Entered STN: 07 Jun 2002

TI Dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.

IN Bendich, Adrienne

PA Smithkline Beecham Corporation, USA

SO PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K

CC 17-6 (Food and Feed Chemistry)

Section cross-reference(s): 18, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002043662	A2	20020606	WO 2001-US44872	20011129
	WO 2002043662	A3	20030123		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

CA 2427681	AA	20020606	CA 2001-2427681	20011129
AU 2002019949	A5	20020611	AU 2002-19949	20011129
EP 1347745	A2	20031001	EP 2001-998311	20011129
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004514685	T2	20040520	JP 2002-545641	20011129
PRAI US 2000-253897P	P	20001129		
WO 2001-US44872	W	20011129		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002043662	ICM	A61K
	IPCI	A61K [ICM,7]
	ECLA	A23L001/30C2; A23L001/302; A23L001/304
CA 2427681	IPCI	A61K0009-14 [ICM,7]; A61K0009-20 [ICS,7]; A61K0009-48 [ICS,7]
EP 1347745	IPCI	A61K0009-14 [ICM,7]; A61K0009-20 [ICS,7]; A61K0009-48 [ICS,7]
JP 2004514685	IPCI	A61K0031-201 [ICM,7]; A23L0001-30 [ICS,7]; A23L0001-302 [ICS,7]; A23L0001-304 [ICS,7]; A23L0001-307 [ICS,7]; A61K0031-355 [ICS,7]; A61K0031-375 [ICS,7]; A61K0031-409 [ICS,7]; A61K0031-4415 [ICS,7]; A61K0031-525 [ICS,7]; A61K0033-06 [ICS,7]; A61P0003-00 [ICS,7]; A61P0003-04 [ICS,7]; A61P0003-06 [ICS,7]; A61P0009-00 [ICS,7]
	FTERM	4B018/MD04; 4B018/MD20; 4B018/MD23; 4B018/MD25; 4B018/MD26; 4B018/ME01; 4C086/AA01; 4C086/AA02; 4C086/BA09; 4C086/BA18; 4C086/BC18; 4C086/CB04; 4C086/CB09; 4C086/HA04; 4C086/MA03; 4C086/MA04; 4C086/NA14; 4C086/ZA70; 4C086/ZC21; 4C086/ZC33; 4C086/ZC35; 4C206/AA01; 4C206/AA02; 4C206/DA05; 4C206/MA03; 4C206/MA04; 4C206/NA14; 4C206/ZA70; 4C206/ZC21; 4C206/ZC33; 4C206/ZC35

AB The invention provides a composition for oral administration comprising a mixture of **conjugated linoleic acid (CLA)**, docosahexaenoic acid "DHA", vitamin E, vitamin C, vitamin B6, vitamin B12, folic acid, and calcium together with a suitable carrier. These compns. are particularly useful as dietary supplements administered to reduce the risk factors of cardiovascular disease, such as elevated serum cholesterol levels and **high blood pressure**.

ST cardiovascular disease prevention diet conjugated linoleate calcium vitamin

IT Antiarteriosclerotics
(antiatherosclerotics; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)

IT Drug delivery systems
(capsules, soft; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)

IT Drug delivery systems
(capsules; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)

IT **Antihypertensives**
Antioxidants
Food additives
(dietary composition containing **conjugated linoleic**

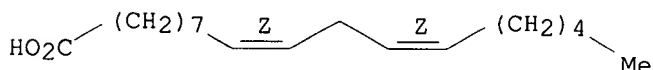
- acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT Glycerides, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study) (dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study) (high-d.; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT Cardiovascular system, disease
(inhibitors of; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study) (low-d.; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT Fatty **acids**, biological studies
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyunsatd., n-3; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT Drug delivery systems
(sachets; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT Drug delivery systems
(tablets; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT 57-88-5, Cholesterol, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study) (blood; dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT 6027-13-0, Homocysteine
RL: BSU (Biological study, unclassified); BIOL (Biological study) (dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT 50-81-7, Vitamin C, biological studies 59-30-3, Folic **acid**, biological studies 60-33-3D, **Linoleic acid**, **conjugated** derivs. 68-19-9, Vitamin B12 1406-18-4, Vitamin E 6217-54-5, Cervonic **acid** 7440-70-2, Calcium, biological studies 8059-24-3, Vitamin B6
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dietary composition containing **conjugated linoleic acid**, calcium and other nutrients for cardiovascular disease prevention.)
- IT 60-33-3D, **Linoleic acid**, **conjugated** derivs.
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dietary composition containing **conjugated linoleic**

acid, calcium and other nutrients for cardiovascular disease prevention.)

RN 60-33-3 HCAPLUS

CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L66 ANSWER 21 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:236406 HCAPLUS

DN 136:268150

ED Entered STN: 28 Mar 2002

TI Topical emollient composition containing fatty acids for ameliorating changes in subcutaneous adipose tissue

IN Allen, Michael P.

PA USA

SO U.S., 16 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM A61K0035-78

ICS A01N0065-00

INCL 424740000

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1, 2, 18, 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6361806	B1	20020326	US 2000-511056	20000223
PRAI	US 2000-511056		20000223		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6361806	ICM	A61K0035-78
	ICS	A01N0065-00
	INCL	424740000
	IPCI	A61K0035-78 [ICM,7]; A01N0065-00 [ICS,7]
	NCL	424/740.000; 424/401.000; 424/484.000; 424/486.000; 424/725.000; 424/764.000; 424/776.000; 514/886.000; 514/887.000; 514/899.000
	ECLA	A61K031/015+M; A61K031/22+M; A61K035/78+M; A61K045/06+M; A61K031/045+M; A61K031/201+M; A61K031/202+M

AB Emollient compns. for topical administration consisting of hydrophilic/hydrophobic emulsions containing a polyacrylate carrier, a vehicle, a mixture of C16:0, C18:0, C18:1 fatty acids and derivs. as penetrants, a balanced mixture of unsatd. C18:1, C18:2 and C18:3 fatty acids, a natural anti-inflammatory compound, a natural analgesic compound, a natural estrogenic compound and a fragrance are described. They are useful for ameliorating symptoms of disease, including mammary fibrocystic disease, cyclic mastitis, inflammation and general and specific pre- and post-menopausal pain and swelling. For example, a cream emulsion was prepared by combining (A) a carrier containing Carbomer 940 0.80 g and water 43.3 g, (B) a vehicle/penetrant phase containing urea 2.95 g, imidurea 0.05 g, sorbitol 1.00 g, sodium borate 0.05 g, sodium ascorbyl phosphate 0.26 g,

and water 14.43, and (C) a hydrophobic phase containing ethanol 10.0 g, isopropyl alc. 6.000 g, propylene glycol 6.00 g, bisabolol 2.00 g, triethanolamine 1.00 g, Brij 99 1.00 g, α -tocopherol 0.10 g, glycerin 0.10 g, methylparaben 0.05 g, propylparaben 0.05 g, **conjugate linoleic acid** 5.00 g, borage oil 5.00 g, vanilla fragrance 0.86 g, and optionally **linoleic acid** 2.75 g and γ -linolenic **acid** 1.25 g.

- ST essential fatty acid topical emulsion adipose tissue; analgesic
antiinflammatory estrogen emollient mammary gland; menopause analgesic
antiinflammatory estrogen emollient
- IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Artemisia; topical emollient composition containing essential fatty acids
for ameliorating changes in s.c. adipose tissue)
- IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C16; topical emollient composition containing essential fatty acids for
ameliorating changes in s.c. adipose tissue)
- IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C16-20; topical emollient composition containing essential fatty acids for
ameliorating changes in s.c. adipose tissue)
- IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C18-unsatd.; topical emollient composition containing essential fatty
acids for ameliorating changes in s.c. adipose tissue)
- IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C18; topical emollient composition containing essential fatty acids for
ameliorating changes in s.c. adipose tissue)
- IT Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C20-22-unsatd.; topical emollient composition containing essential fatty
acids for ameliorating changes in s.c. adipose tissue)
- IT Essential oils
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Matricaria; topical emollient composition containing essential fatty acids
for ameliorating changes in s.c. adipose tissue)
- IT Skin, disease
(aging, wrinkles; topical emollient composition containing essential fatty
acids for ameliorating changes in s.c. adipose tissue)
- IT Dermatitis
(atopic; topical emollient composition containing essential fatty acids for
ameliorating changes in s.c. adipose tissue)
- IT Mammary gland, disease
(benign; topical emollient composition containing essential fatty acids for
ameliorating changes in s.c. adipose tissue)
- IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(blackcurrant; topical emollient composition containing essential fatty
acids for ameliorating changes in s.c. adipose tissue)
- IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(borage seed; topical emollient composition containing essential fatty
acids for

ameliorating changes in s.c. adipose tissue)
 IT Cachexia
 (cancerous; topical emollient composition containing essential fatty acids
 for ameliorating changes in s.c. adipose tissue)
 IT Mammary gland
 (carcinoma, inhibitors; topical emollient composition containing essential
 fatty acids for ameliorating changes in s.c. adipose tissue)
 IT Essential oils
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (chamomile; topical emollient composition containing essential fatty acids
 for ameliorating changes in s.c. adipose tissue)
 IT Fats and Glyceridic oils, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (chia; topical emollient composition containing essential fatty acids for
 ameliorating changes in s.c. adipose tissue)
 IT Epithelium
 (cutaneous, cornified or keratinized; topical emollient composition
 containing essential fatty acids for ameliorating changes in s.c. adipose tissue)
 IT Mammary gland, disease
 (cyclic mastalgia; topical emollient composition containing essential fatty
 acids for ameliorating changes in s.c. adipose tissue)
 IT Mammary gland, disease
 (cyst; topical emollient composition containing essential fatty acids for
 ameliorating changes in s.c. adipose tissue)
 IT Nerve, disease
 (diabetic neuropathy; topical emollient composition containing essential
 fatty acids for ameliorating changes in s.c. adipose tissue)
 IT Skin, disease
 (dry; topical emollient composition containing essential fatty acids for
 ameliorating changes in s.c. adipose tissue)
 IT Drug delivery systems
 (emollients; topical emollient composition containing essential fatty acids
 for ameliorating changes in s.c. adipose tissue)
 IT Drug delivery systems
 (emulsions, topical; topical emollient composition containing essential
 fatty acids for ameliorating changes in s.c. adipose tissue)
 IT Skin
 (epithelium, cornified or keratinized; topical emollient composition
 containing essential fatty acids for ameliorating changes in s.c. adipose tissue)
 IT Fatty acids, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (essential; topical emollient composition containing essential fatty acids
 for ameliorating changes in s.c. adipose tissue)
 IT Fatty acids, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (esters, macrogol; topical emollient composition containing essential fatty
 acids for ameliorating changes in s.c. adipose tissue)
 IT Fatty acids, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (ethoxylated; topical emollient composition containing essential fatty
 acids for

ameliorating changes in s.c. adipose tissue)
 IT Fats and Glyceridic oils, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (evening primrose; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)
 IT Mammary gland, neoplasm
 (fibroadenoma; topical emollient composition containing essential fatty acids
 for ameliorating changes in s.c. adipose tissue)
 IT Mammary gland, disease
 (fibrocystic; topical emollient composition containing essential fatty acids for
 ameliorating changes in s.c. adipose tissue)
 IT Hand
 Nail (anatomical)
 (fingernail, discolored or splitting; topical emollient composition containing
 essential fatty acids for ameliorating changes in s.c. adipose tissue)
 IT Fats and Glyceridic oils, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (grape seed; topical emollient composition containing essential fatty acids for
 ameliorating changes in s.c. adipose tissue)
 IT Fats and Glyceridic oils, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (hemp; topical emollient composition containing essential fatty acids for
 ameliorating changes in s.c. adipose tissue)
 IT Infection
 (herpes zoster; topical emollient composition containing essential fatty acids
 for ameliorating changes in s.c. adipose tissue)
 IT Mammary gland, disease
 (hyperplasia; topical emollient composition containing essential fatty acids for
 ameliorating changes in s.c. adipose tissue)
 IT **Hypertension**
 (in adipose tissue; topical emollient composition containing **essential** fatty acids for ameliorating changes in s.c. adipose tissue)
 IT Fats and Glyceridic oils, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (kukui; topical emollient composition containing essential fatty acids for
 ameliorating changes in s.c. adipose tissue)
 IT Myoma
 (leiomyoma; topical emollient composition containing essential fatty acids for
 ameliorating changes in s.c. adipose tissue)
 IT Milk
 (low production; topical emollient composition containing essential fatty acids for
 ameliorating changes in s.c. adipose tissue)
 IT Adenoma
 (mammary fibroadenoma; topical emollient composition containing essential fatty acids for
 ameliorating changes in s.c. adipose tissue)
 IT Antitumor agents
 (mammary gland carcinoma; topical emollient composition containing essential fatty acids for
 ameliorating changes in s.c. adipose tissue)
 IT Cyst, pathological
 Hyperplasia
 (mammary; topical emollient composition containing essential fatty acids for

ameliorating changes in s.c. adipose tissue)

IT Circulation
(microcirculation, disorder; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Analgesics
Anti-inflammatory agents
(natural; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Estrogens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(natural; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Nerve, disease
(neuropathy, shingles associated; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Detergents
(nonionic; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Phaseolus vulgaris
(oils; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Drug delivery systems
(ointments, creams; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Menopause
(postmenopause, estrogen insufficiency; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Ovarian cycle
(premenstrual syndrome; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Diet
(reducing; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Connective tissue
(s.c., disorder; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Adipose tissue
(s.c.; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Skin, disease
(scar; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Fats and Glyceridic oils, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sesame; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Skin, disease
(shingles associated; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Foot
Nail (anatomical)
(toenail, discolored or splitting; topical emollient composition containing essential fatty acids for ameliorating changes in s.c. adipose tissue)

IT Aging, animal
Antihypertensives
 Antitumor agents
 Dermatitis
 Eczema
 Fertility disorders
 Malnutrition
 Mastitis
 Odor and Odorous substances
 Perfumes
 Permeation enhancers
 Psoriasis
 Sjogren's syndrome
 Starvation, animal
 (topical emollient composition containing essential fatty acids for
 ameliorating
 changes in s.c. adipose tissue)

IT Canola oil
 Corn oil
 Cottonseed oil
 Glycerides, biological studies
 Linseed oil
 Phospholipids, biological studies
 Safflower oil
 Soybean oil
 Sunflower oil
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (topical emollient composition containing essential fatty acids for
 ameliorating
 changes in s.c. adipose tissue)

IT Domestic animal
 Human
 (topical emollient composition containing essential fatty acids for
 ameliorating
 changes in s.c. adipose tissue of humans and domestic animals)

IT Drug delivery systems
 (topical, sustained-release; topical emollient composition containing
 essential
 fatty acids for ameliorating changes in s.c. adipose tissue)

IT Diabetes mellitus
 (vascular complication of; topical emollient composition containing
 essential
 fatty acids for ameliorating changes in s.c. adipose tissue)

IT Fats and Glyceridic oils, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (vegetable; topical emollient composition containing essential fatty acids
 for
 ameliorating changes in s.c. adipose tissue)

IT Fats and Glyceridic oils, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (walnut; topical emollient composition containing essential fatty acids for
 ameliorating changes in s.c. adipose tissue)

IT Fats and Glyceridic oils, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (wheat germ; topical emollient composition containing essential fatty acids
 for
 ameliorating changes in s.c. adipose tissue)

IT Essential oils
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (yarrow; topical emollient composition containing essential fatty acids for

ameliorating changes in s.c. adipose tissue)
 IT 56-81-5, Glycerin, biological studies 57-10-3, Palmitic acid, biological studies 57-13-6, Urea, biological studies 57-55-6, Propylene glycol, biological studies 57-88-5, Cholesterol, biological studies 60-33-3, Linoleic acid, biological studies 64-17-5, Ethanol, biological studies 80-59-1D, Tiglic acid, esters 94-13-3, Propylparaben 94-26-8, Butylparaben 99-76-3, Methylparaben 99-96-7, p-Hydroxybenzoic acid, biological studies 110-27-0, Isopropyl myristate 112-80-1, Oleic acid, biological studies 142-91-6, Isopropyl palmitate 275-51-4, Azulene 373-49-9, Palmitoleic acid 463-40-1, α -Linolenic acid 506-26-3, γ -Linolenic acid 506-32-1, Arachidonic acid 515-69-5, α -Bisabolol 515-69-5D, Bisabolol, hydroxy derivs. 529-05-5, 7-Ethyl-1,4-dimethylazulene 1783-84-2, Dihomo- γ -linolenic acid 1839-11-8, **Conjugated linoleic acid** 9003-01-4, Polyacrylic acid 9004-98-2, Brij 98 9005-00-9, Brij 721 9007-16-3, Carbomer 934 23089-26-1, Levomenol 29656-58-4D, Hydroxybenzoic acid, alkyl esters 39236-46-9, Imidurea 57916-92-4, Carbomer 934P 76050-42-5, Carbomer 940 96827-24-6, Carbomer 1342
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (topical emollient composition containing essential fatty **acids** for ameliorating changes in s.c. adipose tissue)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Crandall; US 5945409 A 1999 HCAPLUS
- (2) Deckner; US 5989536 A 1999 HCAPLUS
- (3) Friedman; US 5811129 A 1998 HCAPLUS

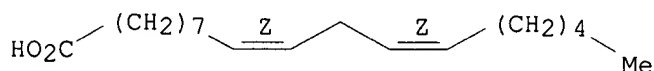
IT 60-33-3, Linoleic acid, biological studies 1839-11-8, **Conjugated linoleic acid**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (topical emollient composition containing essential fatty **acids** for ameliorating changes in s.c. adipose tissue)

RN 60-33-3 HCAPLUS

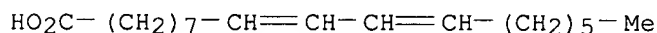
CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 1839-11-8 HCAPLUS

CN 9,11-Octadecadienoic acid (6CI, 8CI, 9CI) (CA INDEX NAME)



L66 ANSWER 22 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:523307 HCAPLUS

DN 135:317738

ED Entered STN: 19 Jul 2001

TI Editorial to nutrition research reviews

AU Forbes, J. M.

CS Nutrition Research Reviews, UK

SO Nutrition Research Reviews (2001), 14(1), 1-2

CODEN: NREREX; ISSN: 0954-4224

PB CABI Publishing

DT Journal; General Review
LA English
CC 18-0 (Animal Nutrition)
AB An editorial review with 10 refs. A brief outline of the 7 review papers published in this issue is provided. The reviews cover the topics of **blood pressure** regulation and dietary micronutrient vitamin and mineral intakes, biotin metabolism and cell cycle regulation, endogenous cannabinoids role in appetite regulation, nutrition during space flights, dietary Ca intake role in bone health in children and adolescents, nutritional significance of **conjugated linoleic acid**, and anti-adipogenic properties of **conjugated linoleic acid**.
ST review nutrition
IT Nutrition, animal
(nutrition research editorial review)
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Dakshinamurti, K; Nutrition Research Reviews 2001, V14, P3 HCAPLUS
(2) Grizard, J; Nutrition Research Reviews 1995, V8, P67 HCAPLUS
(3) Kirkham, T; Nutrition Research Reviews 2001, V14, P65 HCAPLUS
(4) Kun, Z; Nutrition Research Reviews 2001, V14, P119 HCAPLUS
(5) Lawson, R; Nutrition Research Reviews 2001, V14, P153 HCAPLUS
(6) Millward, D; Nutrition Research Reviews 1995, V8, P93 HCAPLUS
(7) Millward, D; Nutrition Research Reviews 1996, V9, P67
(8) Roche, H; Nutrition Research Reviews 2001, V14, P173 HCAPLUS
(9) Stein, T; Nutrition Research Reviews 2001, V14, P87 HCAPLUS
(10) Zemleni, J; Nutrition Research Reviews 2001, V14, P45 HCAPLUS

L66 ANSWER 23 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:296192 HCAPLUS
DN 134:325639
ED Entered STN: 26 Apr 2001
TI Bioactive substances in milk with properties decreasing risk of cardiovascular diseases
AU Pfeuffer, Maria; Schrezenmeir, J.
CS Department of Physiology and Biochemistry of Nutrition, Federal Dairy Research Centre, Kiel, 24103, Germany
SO British Journal of Nutrition (2000), 84(Suppl. 1), S155-S159
CODEN: BJNUAV; ISSN: 0007-1145
PB CABI Publishing
DT Journal; General Review
LA English
CC 18-0 (Animal Nutrition)
Section cross-reference(s): 14
AB A review with 47 refs. Milk is often seen as a potential promoter of atherosclerosis and coronary heart disease because it is a source of cholesterol and saturated fatty acids. But there are several studies indicating that milk and milk products may not affect adversely blood lipids as would be predicted from its fat content and fat composition. There are even factors in milk and milk products which may actively protect from this condition by improving several risk factors. Calcium, bioactive peptides and as yet unidentified components in whole milk may protect from **hypertension**, and folic acid, vitamin B6 (pyridoxine) and B12 (cyanocobalamin) or other unidentified components of skim milk may contribute to low homocysteine levels. **Conjugated linoleic acid** may have hypolipidemic and antioxidative and thus antiatherosclerotic properties. Epidemiol. studies suggest that milk and milk products fit well into a healthy eating pattern emphasizing cereals and vegetables.
ST review milk coronary heart disease risk redn

- IT Antiarteriosclerotics
(antiatherosclerotics; bioactive substances in milk with properties decreasing risk of cardiovascular diseases)
- IT **Hypertension**
Milk
(bioactive substances in milk with properties decreasing risk of cardiovascular diseases)
- IT Artery, disease
(coronary; bioactive substances in milk with properties decreasing risk of cardiovascular diseases)
- IT Cardiovascular system
(disease; bioactive substances in milk with properties decreasing risk of cardiovascular diseases)
- IT Fats and Glyceridic oils, biological studies
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(milk; bioactive substances in milk with properties decreasing risk of cardiovascular diseases)
- IT 7440-70-2, Calcium, biological studies **121250-47-3, Conjugated linoleic acid**
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(bioactive substances in milk with properties decreasing risk of cardiovascular diseases)

RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Abbott, R; Stroke 1996, V27, P813 HCAPLUS
- (2) Agerbaek, M; European Journal of Clinical Nutrition 1995, V49, P346 MEDLINE
- (3) Appel, L; New England Journal of Medicine 1997, V336, P1117 MEDLINE
- (4) Artaud-Wild, S; Circulation 1993, V88, P2771 MEDLINE
- (5) Ascherio, A; International Journal of Epidemiology 1991, V20, P886 MEDLINE
- (6) Banni, S; Journal of Nutritional Biochemistry 1996, V7, P150 HCAPLUS
- (7) Berg, J; Lipids 1995, V30, P599
- (8) Berner, L; Journal of Nutrition 1993, V123, P1175 MEDLINE
- (9) Buonopane, G; Journal of the American College of Nutrition 1992, V11, P56 MEDLINE
- (10) Duell, P; Current Opinions of Lipidology 1997, V8, P28 HCAPLUS
- (11) Fehily, A; British Journal of Nutrition 1993, V69, P303 MEDLINE
- (12) Gilliland, S; Applied Environmental Microbiology 1985, V49, P377 HCAPLUS
- (13) Grundy, S; Arteriosclerosis 1988, V8, P95 MEDLINE
- (14) Grundy, S; Circulation 1998, V97, P1876 MEDLINE
- (15) Grundy, S; Journal of Lipid Research 1990, V31, P1149 HCAPLUS
- (16) Grunewald, K; Journal of Food Science 1982, V47, P2078 HCAPLUS
- (17) Ha, Y; Cancer Research 1990, V50, P1097 HCAPLUS
- (18) Hata, Y; American Journal of Clinical Nutrition 1996, V64, P767 MEDLINE
- (19) International Dairy Federation; Bulletin IDF 1997, V323, P37
- (20) Ip, C; Cancer Research 1991, V51, P6118 HCAPLUS
- (21) Lee, K; Atherosclerosis 1994, V108, P19 HCAPLUS
- (22) Mann, G; American Journal of Clinical Nutrition 1974, V27, P464 HCAPLUS
- (23) Martin, M; Lancet ii 1986, P933 MEDLINE
- (24) Massey, L; Journal of Dairy Science 1984, V67, P255 HCAPLUS
- (25) Masuda, O; Journal of Nutrition 1996, V126, P3063 HCAPLUS
- (26) Matsui, T; Journal of Nutrition 1997, V127, P1357 HCAPLUS
- (27) Meisel, H; Biopoly 1997, V43, P119 HCAPLUS
- (28) Miller, G; IDF Bulletin 1997, V322, P25 HCAPLUS
- (29) Munday, J; British Journal of Nutrition 1999, V81, P251 HCAPLUS
- (30) Nakamura, Y; Journal of Dairy Science 1995, V78, P1253 MEDLINE
- (31) Nicolosi, R; Artery 1997, V22, P266 HCAPLUS

- (32) Oshaug, A; European Journal of Clinical Nutrition 1998, V52, P7 MEDLINE
 (33) Parodi, P; Medical Hypotheses 1997, V49, P313 HCAPLUS
 (34) Pfeuffer, M; IDF Bulletin 1990, V253, P19 HCAPLUS
 (35) Reusser, M; Nutrition Reviews 1994, V52, P367 MEDLINE
 (36) Richelsen, B; European Journal of Clinical Nutrition 1996, V50, P811
 MEDLINE
 (37) Rossouw, J; American Journal of Clinical Nutrition 1981, V34, P351 HCAPLUS
 (38) Schaafsma, G; European Journal of Clinical Nutrition 1998, V52, P436
 HCAPLUS
 (39) Schorah, C; European Journal of Clinical Nutrition 1998, V52, P407 HCAPLUS
 (40) Shantha, N; Journal of Food Science 1995, V60, P695 HCAPLUS
 (41) Shaper, K; British Medical Journal 1991, V302, P785
 (42) Sharpe, S; American Journal of Clinical Nutrition 1994, V59, P929 MEDLINE
 (43) Stoll, P; British Journal of Nutrition 1991, V66, P129 HCAPLUS
 (44) Tucker, K; Journal of Nutrition 1996, V126, P3025 HCAPLUS
 (45) Ubbink, J; Nutrition Reviews 1996, V54, P213 MEDLINE
 (46) Verhoef, P; Current Opinions of Lipidology 1998, V9, P17 HCAPLUS
 (47) Yamamoto, N; Journal of Dairy Science 1994, V77, P197

IT **121250-47-3, Conjugated linoleic acid**

RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)

(bioactive substances in milk with properties decreasing risk of cardiovascular diseases)

RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO₂C⁻ (CH₂)₁₆-Me

L66 ANSWER 24 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN **2000:772592** HCAPLUS

DN 133:309305

ED Entered STN: 03 Nov 2000

TI Conjugated fatty acid esters

IN Kudo, Satoshi; Mizusawa, Naomi; Hamura, Mahoko

PA Kabushiki Kaisha Yakult Honsha, Japan

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM C07C0069-587

ICS A23D0009-00; A61K0031-201; A61K0009-48; A61K0009-20; A61P0003-04;
 A61P0003-06; A23L0001-30

CC 17-6 (Food and Feed Chemistry)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000064854	A1	20001102	WO 2000-JP2703	20000425
	W: AU, BR, CA, CN, JP, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1174416	A1	20020123	EP 2000-917463	20000425

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI

US 2005165100	A1	20050728	US 2005-86870	20050321
PRAI JP 1999-120706	A	19990427		
WO 2000-JP2703	W	20000425		
US 2001-19834	B1	20011025		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000064854	ICM	C07C0069-587
	ICS	A23D0009-00; A61K0031-201; A61K0009-48; A61K0009-20; A61P0003-04; A61P0003-06; A23L0001-30
	IPCI	C07C0069-587 [ICM,7]; A23D0009-00 [ICS,7]; A61K0031-201 [ICS,7]; A61K0009-48 [ICS,7]; A61K0009-20 [ICS,7]; A61P0003-04 [ICS,7]; A61P0003-06 [ICS,7]; A23L0001-30 [ICS,7]
	ECLA	A23D009/00; A23L001/30C; A23L001/30C2; A61K031/231; A61K031/232; A61K047/14; A61K047/48H4; C07C069/587; C11C003/02
EP 1174416	IPCI	C07C0069-587 [ICM,6]; A23D0009-00 [ICS,6]; A61K0031-201 [ICS,6]; A61K0009-48 [ICS,6]; A61K0009-20 [ICS,6]; A61P0003-04 [ICS,6]; A61P0003-06 [ICS,6]; A23L0001-30 [ICS,6]
	ECLA	A23D009/00; A23L001/30C2; A61K031/231; A61K047/14; A61K047/48H4; C07C069/587; C11C003/02; C11C003/08
US 2005165100	IPCI	C07C0051-347 [ICM,7]; A61K0031-225 [ICS,7]
	NCL	514/547.000
	ECLA	A23D009/00; A23L001/30C; A23L001/30C2; A61K031/231; A61K031/232; A61K047/14; A61K047/48H4; C07C069/587; C11C003/02; C11C003/08

AB Use of conjugated fatty acid glycerides, which are formed by converting conjugated fatty acids having conjugated double bond(s) in the mol. into glycerol esters, is described to increase physiol. effects of the conjugated fatty acids, and to control the bitterness or astringency of the conjugated fatty acids, thereby making these compds. useful in health food preparation For example, glycerides having **conjugated linoleic acid** in the mol. improve lipid metabolism, preventing obesity and **hypertension**.

ST fatty acid ester health food bitterness

IT Bitterness

Health food

(conjugated fatty acid esters for controlling bitterness in health food)

IT **Hypertension**

(conjugated fatty acid esters for controlling **hypertension**)

IT Obesity

(conjugated fatty acid esters for controlling obesity)

IT Fatty acids, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(esters; conjugated fatty acid esters for controlling bitterness in health food)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Arcos; Biotechnology Letters 1998, V20(6), P617 HCAPLUS
- (2) Kabushiki Kaisha Janifu Tec; JP 2000144170 A 2000 HCAPLUS
- (3) Nisshin Flour Milling Co Ltd; JP 07267898 A 1995 HCAPLUS
- (4) Nitsusui Seiyaku K K; JP 840981 A 1996
- (5) Otsuka Pharmaceutical Co Ltd; JP 1179987 A
- (6) Otsuka Pharmaceutical Co Ltd; WO 9912538 A1 1999 HCAPLUS
- (7) Wisconsin Alumni Research Foundation; US 5554646 A HCAPLUS

(8) Wisconsin Alumni Research Foundation; WO 9606605 A1 HCAPLUS

(9) Wisconsin Alumni Research Foundation; JP 10508189 A 1998

L66 ANSWER 25 OF 25 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:613544 HCAPLUS

DN 133:309388

ED Entered STN: 06 Sep 2000

TI Safety of **conjugated linoleic acid** (**CLA**) in overweight or obese human volunteers

AU Berven, Grethe; Bye, Amund; Hals, Ottar; Blankson, Henrietta; Fagertun, Hans; Thom, Erling; Wadstein, Jan; Gudmundsen, Ola

CS Scandinavian Clinical Research, Kjeller, N-2027, Norway

SO European Journal of Lipid Science and Technology (2000), 102(7), 455-462
CODEN: EJLTFM; ISSN: 1438-7697

PB Wiley-VCH Verlag GmbH

DT Journal

LA English

CC 18-5 (Animal Nutrition)

AB The main objective of the study was to investigate the safety of **conjugated linoleic acid** (**CLA**) in healthy volunteers. The safety and effects of **CLA** on body composition were investigated in 60 overweight or obese humans with body mass index (BMI) 27.5-39.0 kg/m². They were divided into 2 groups given 3.4 g **CLA** or placebo (4.5 g olive oil) daily for 12 wk. The safety was evaluated by anal. of blood hematol. and biochem. parameters and by clin. exams. at baseline and week 12. Vital signs and adverse events were checked at baseline and weeks 6 and week 12. Bio-Impedance Assessment was used for body composition measurements. Adverse events occurred in 10% subjects. No differences in adverse events or other safety parameters were found between the 2 treatment groups. Small changes in the biochem. safety data were not regarded as clin. significant. No clin. significant changes in vital signs were observed. In the **CLA** group, the mean body weight decreased by 1.1 kg, while the mean BMI decreased by 0.4 kg/m². The overall treatment effect of **CLA** on body weight and BMI was not significant. There were no differences between the groups with regard to **CLA** efficacy parameters. Thus, **CLA** in the used dose is a safe substance in healthy humans with regard to the safety parameters investigated.

ST nutrition **conjugated linoleic acid** safety
blood biochem index obesity

IT Lipoproteins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(Lp(a); dietary **conjugated linoleic acid**

safety and effects on blood parameters and body weight in overweight or obese humans)

IT Blood

Blood cell

Blood pressure

Body weight

Nutrition, animal

Obesity

Safety

(dietary **conjugated linoleic acid** safety

and effects on blood parameters and body weight in overweight or obese humans)

IT Ferritins

Glycerides, biological studies

Hemoglobins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)
 (dietary **conjugated linoleic acid** safety
 and effects on blood parameters and body weight in overweight or obese
 humans)

IT Hemoglobins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
 (Biological study); PROC (Process)
 (glycohemoglobins; dietary **conjugated linoleic
 acid** safety and effects on blood parameters and body weight in
 overweight or obese humans)

IT **121250-47-3, Conjugated linoleic acid**

RL: ADV (Adverse effect, including toxicity); FFD (Food or feed use); BIOL
 (Biological study); USES (Uses)
 (dietary **conjugated linoleic acid** safety
 and effects on blood parameters and body weight in overweight or obese
 humans)

IT 57-88-5, Cholesterol, biological studies 60-27-5, Creatinine 635-65-4,
 Bilirubin, biological studies 7440-09-7, Potassium, biological studies
 7440-23-5, Sodium, biological studies 7440-70-2, Calcium, biological
 studies 9000-86-6, Gpt 9000-97-9, Got 9001-15-4, Creatine
 phosphokinase 9001-60-9 9001-62-1, Lipase 9046-27-9, γ
 Glutamyl transferase 16887-00-6, Chloride, biological studies
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
 (Biological study); PROC (Process)
 (dietary **conjugated linoleic acid** safety
 and effects on blood parameters and body weight in overweight or obese
 humans)

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Aitken, R; Proc R Soc Med 1966, V62, P989
 - (2) Atkinson, R; Advances in conjugated linoleic acid research 1999, V1, P348
 HCAPLUS
 - (3) Bell, N; Eur J Clin Nutr 1998, V52, P856 MEDLINE
 - (4) Belury, M; Lipids 1997, V32, P199 HCAPLUS
 - (5) Belury, M; Nutr Dis Update J 1997, V1, P58
 - (6) Belury, M; Nutr Rev 1995, V53, P83 MEDLINE
 - (7) Cook, M; Poult Sci 1993, V72, P1301 HCAPLUS
 - (8) Doyle, E; Inform 1998, V9, P69
 - (9) Dugan, M; Can J Anim Sci 1997, V77, P723 HCAPLUS
 - (10) Ferreira, M; J Strength Conditioning Res 1997, V11, P280
 - (11) Fritsche, J; Z Lebensm Unters Forsch A 1998, V206, P77 HCAPLUS
 - (12) Ha, Y; Cancer Res 1990, V50, P1097 HCAPLUS
 - (13) Ha, Y; Carcinogenesis 1987, V8, P1881 HCAPLUS
 - (14) Ip, C; Cancer Res 1994, V54, P1212 HCAPLUS
 - (15) Knekt, P; Br J Cancer 1996, V73, P687 MEDLINE
 - (16) Lee, K; Atherosclerosis 1994, V108, P19 HCAPLUS
 - (17) Liew, C; Carcinogenesis 1995, V16, P3037 HCAPLUS
 - (18) Liu, K; Cancer Lett 1998, V127, P15 HCAPLUS
 - (19) Lowery, L; Med Sci Sports Exerc 1998, V30, P182
 - (20) Miller, C; Biochem Biophys Res Commun 1994, V198, P1107 HCAPLUS
 - (21) Munday, J; Br J Nutr 1999, V81, P251 HCAPLUS
 - (22) Nicolosi, R; Artery 1997, V22, P266 HCAPLUS
 - (23) Park, Y; Lipids 1997, V32, P853 HCAPLUS
 - (24) Scimeca, J; Food Chem Toxicol 1998, V36, P391 HCAPLUS
 - (25) Sugano, M; Lipids 1998, V33, P521 HCAPLUS
 - (26) Vessby, B; Chem Phys Lipids 1999, V101
 - (27) West, D; Am J Physiol 1998, V44, PR667
- IT **121250-47-3, Conjugated linoleic acid**
 RL: ADV (Adverse effect, including toxicity); FFD (Food or feed use); BIOL
 (Biological study); USES (Uses)

(dietary **conjugated linoleic acid** safety
and effects on blood parameters and body weight in overweight or obese
humans)

RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO₂C-(CH₂)₁₆-Me

=> => d 144 bib abs hitstr retable tot

L44 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:329203 HCAPLUS

DN 139:333040

TI Chitosan conjugated **CLA** gel for treatment of stable chronic
psoriasis vulgaris

AU Lassus, Allan; **Wadstein, Jan**; Thom, Erling

CS Helsinki Research Centre, Helsinki, Finland

SO Journal of Applied Cosmetology (2002), 20(4), 219-225

CODEN: JACOEL; ISSN: 0392-8543

PB International Ediemme

DT Journal

LA English

AB A new gel containing **Conjugated Linoleic Acid** (**CLA**) used in adult patients with chronic stable psoriasis vulgaris, showed promising therapeutic results. The duration of the study was 4 wk. Forty patients were included; 20 received in a randomized manner treatment with the new gel and 20 got placebo. The study was carried out as a double blind trial. Thirty-eight patients concluded the study according to the protocol. The two withdrawals were in the placebo group and were due to deterioration of the disease. The treatment with the **CLA** gave significant improvements in the psoriasis disease while the results in the placebo group were not significant. The results were judged through clin. evaluation by the investigator (AL) as well as with objective measurements using Dermascan C. A significant correlation between the subjective clin. evaluation and the objective measurements is observed. The tolerability was good in both groups. However, several patients in both groups were of the opinion that the vehicle had a drying effect on the skin. Based on these observations it is recommended that the present vehicle should be changed in order to avoid the drying effect on the skin.

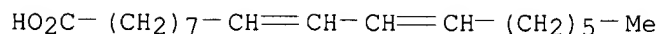
IT **1839-11-8D**, 9,11-Octadecadienoic acid,

conjugates with Chitoclear 400

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chitosan **conjugated linoleic acid** (**CLA**) gel for treatment of stable chronic psoriasis vulgaris)

RN 1839-11-8 HCAPLUS

CN 9,11-Octadecadienoic acid (6CI, 8CI, 9CI) (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Lassus, A	2000			An unpublished pilot	
Pitterman, W	1997			Chitin Handbook	
Thom, E	2001	119	51	J Appl Cosmetol	

L44 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:695819 HCAPLUS

DN 137:222086

TI Compositions comprising an o/w emulsion containing **conjugated linoleic acid**IN **Rømmereit, Jan**; Klaveness, Jo

PA Natural Asa, Norway; Cockbain, Julian

SO PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002070014	A1	20020912	WO 2002-GB996	20020307
	WO 2002070014	C1	20031127		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	CA 2455226	AA	20020912	CA 2002-2455226	20020307
	EP 1372728	A1	20040102	EP 2002-704908	20020307
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	US 2004077724	A1	20040422	US 2003-471049	20031222
PRAI	GB 2001-5622	A	20010307		
	WO 2002-GB996	W	20020307		

AB The present invention provides a method of treatment of a human or non-human (e.g. mammalian, avian or reptilian) animal subject by the parenteral administration of a lipophilic pharmaceutical agent, the improvement comprising administering said pharmaceutical agent in an oil-in-water emulsion containing a **conjugated linoleic acid (CLA)** or a physiologically tolerable derivative thereof. A mixture of 10 g **CLA** triglyceride (produced by reacting **CLA** with glycerol), 1.0 g purified egg phospholipid, 50 mg sodium stearate and 5 g α -tocopherol was finely dispersed. A mixture of 100 mL water containing 2.5 g glycerol and 0.05 mmol NaOH was added to the **CLA** mixture during stirring at room temperature. The mixture was homogenized in a

high pressure homogenator and the final emulsion filled into vials and heat-sterilized.

IT 60-33-3D, **Linoleic acid, conjugates**

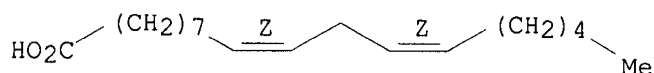
**2420-56-6D, conjugates 2540-56-9D,
conjugates**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(comps. comprising o/w emulsion containing **conjugated
linoleic acid**)

RN 60-33-3 HCAPLUS

CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

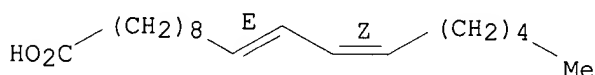
Double bond geometry as shown.



RN 2420-56-6 HCAPLUS

CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

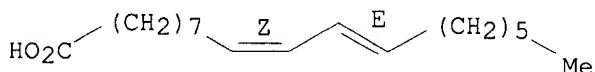
Double bond geometry as shown.



RN 2540-56-9 HCAPLUS

CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Conlinco Inc	1999			EP 0954975 A	HCAPLUS
Cook, M	1998			US 5760083 A	HCAPLUS
Coury, W	2000			WO 0000186 A	HCAPLUS
Gervais Danone Co	2000			FR 2784268 A	HCAPLUS
James, N	1999			US 5885594 A	HCAPLUS
Kritchevsky, D	2000			WO 0009118 A	HCAPLUS
Lee, K	1998			US 5837733 A	HCAPLUS
Otsuka Pharma Co Ltd	2000			EP 1010424 A	HCAPLUS
Remmereit, J	2000			US 6019990 A	HCAPLUS
Tufts College	2000			WO 0067596 A	HCAPLUS
Unilever Plc	2001			WO 0108650 A	HCAPLUS
Unilever Plc	2001			WO 0108652 A	HCAPLUS
Univ South Dakota	1999			WO 9908540 A	HCAPLUS
Wisconsin Alumni Res Fo	1996			WO 9606605 A	HCAPLUS
Wisconsin Alumni Res Fo	1997			WO 9746118 A	HCAPLUS

L44 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:655079 HCAPLUS

DN 137:179896

TI **Conjugated linoleic acid** in treatment and
prophylaxis of diabetes

IN **Remmereit, Jan; Wadstein, Jan;** Klaveness, Jo
 PA Natural Corporation, Norway
 SO U.S., 8 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6440931	B1	20020827	US 2000-510059	20000222
PRAI	US 1999-121232P	P	19990223		

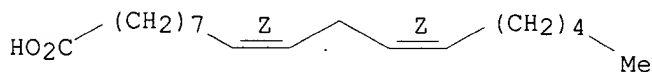
AB The invention provides method of treatment and prophylaxis of both insulin- (Type I) and non-insulin-dependent (type II) diabetes mellitus, by administration of **conjugated linoleic acid (CLA)** in the form of pure isomers, selected isomer mixts. or non-selected isomer mixts. The **conjugated linoleic acids** may be administered alone, or in combination with other diabetes therapeutic regimes.

IT **60-33-3**, 9,12-Octadecadienoic acid (9Z,12Z)-, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (**conjugated linoleic acid** in treatment and prophylaxis of diabetes)

RN 60-33-3 HCAPLUS

CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



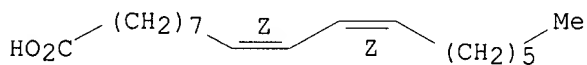
IT **544-70-7**, 9-cis,11-cis-Octadecadienoic acid
544-71-8, 9-trans,11-trans-Octadecadienoic acid
1072-36-2, 10-trans,12-trans-Octadecadienoic acid
2420-56-6, 10-trans,12-cis-Octadecadienoic acid
2540-56-9, 9-cis,11-trans-Octadecadienoic acid
7307-45-1, 10-cis,12-cis-Octadecadienoic acid

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (**conjugated linoleic acid** in treatment and prophylaxis of diabetes)

RN 544-70-7 HCAPLUS

CN 9,11-Octadecadienoic acid, (9Z,11Z)- (9CI) (CA INDEX NAME)

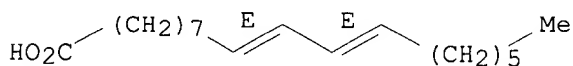
Double bond geometry as shown.



RN 544-71-8 HCAPLUS

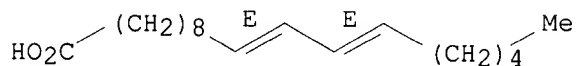
CN 9,11-Octadecadienoic acid, (9E,11E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



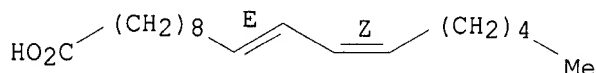
RN 1072-36-2 HCAPLUS
 CN 10,12-Octadecadienoic acid, (10E,12E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



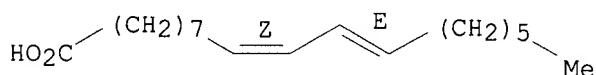
RN 2420-56-6 HCAPLUS
 CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



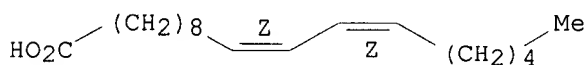
RN 2540-56-9 HCAPLUS
 CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 7307-45-1 HCAPLUS
 CN 10,12-Octadecadienoic acid, (10Z,12Z)- (9CI) (CA INDEX NAME)

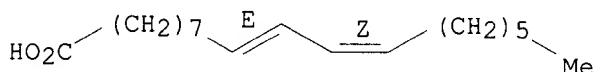
Double bond geometry as shown.



IT 872-23-1 2420-44-2 121250-47-3,
Conjugated linoleic acid 121250-47-3D
 , Octadecadienoic acid, esters
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (conjugated linoleic acid in treatment
 and prophylaxis of diabetes)

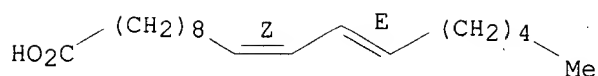
RN 872-23-1 HCAPLUS
 CN 9,11-Octadecadienoic acid, (9E,11Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

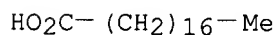


RN 2420-44-2 HCAPLUS
 CN 10,12-Octadecadienoic acid, (10Z,12E)- (9CI) (CA INDEX NAME)

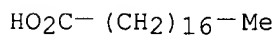
Double bond geometry as shown.



RN 121250-47-3 HCAPLUS
 CN Octadecadienoic acid (9CI) (CA INDEX NAME)
 CM 1
 CRN 57-11-4
 CMF C18 H36 O2



RN 121250-47-3 HCAPLUS
 CN Octadecadienoic acid (9CI) (CA INDEX NAME)
 CM 1
 CRN 57-11-4
 CMF C18 H36 O2



RETABLE

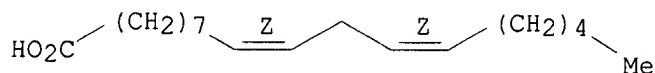
Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
=====	=====	=====	=====	=====	=====
Anon	1999			WO 9929317	HCAPLUS
Belury	1995	53	83	Nut Rev	
Berdeaux	1997	74	1011	JAOCS	HCAPLUS
Cesano	1998	18	1429	Anticancer Res	HCAPLUS
Chin	1992	5	185	J Food Comp Anal	HCAPLUS
Cook	1995			US 5428072 A	HCAPLUS
Cook	1995			US 5430066 A	HCAPLUS
Cook	1996			US 5554646 A	HCAPLUS
Cook	1996			US 5585400 A	HCAPLUS
Cook	1998	8	459	International Dairy	HCAPLUS
Cowen	1950	72	492	JAOCS	
Durgam	1997	116	121	Cancer Lett	HCAPLUS
Gabbay	1976	295	443	N Engl J Med	MEDLINE
Gumbirer	1998	21	9	Diabetes Care	
Horrobin	1987			US 4681896 A	HCAPLUS
Horrobin	1989			US 4806569 A	HCAPLUS
Horrobin	1989			US 4868212 A	HCAPLUS
Houseknecht	1998	244	678	Biochem, Biophys Res	HCAPLUS
Houseknecht	1998	244	678	Biochemical and Biop	HCAPLUS
Ip	1997	18	755	Carcinogenesis	HCAPLUS
Iwamura	1984			US 4472432 A	HCAPLUS
Jerome	2000			US 6060514 A	HCAPLUS
Jie, L	1997	32	1019	Lipids	
Koenig	1976	295	417	N Engl J Med	MEDLINE
Lee	1994	108	19	Atherosclerosis	HCAPLUS
Leonhardt	1996	254	173	Clin Chim Acta	

Liu	1997	32	725	Lipids	HCAPLUS
Remmereit	2000			US 6034132 A	HCAPLUS
Remmereit	2000			US 6042869 A	HCAPLUS
Rubin	1991			US 5034415 A	HCAPLUS
Saebo	2000			US 6015833 A	HCAPLUS
Santini	1997	46	1853	Diabetes	HCAPLUS
Schwertner	1996			US 5496735 A	HCAPLUS
Sebedio	1999	2	499	Current Opinion in C	HCAPLUS
Stewart	1989			US 4826877 A	HCAPLUS
Thompson	1997	57	5067	Cancer Res	HCAPLUS
West	1998	275	R667	Am J Physiol	HCAPLUS
Wong	1997	17	987	Anticancer Res	HCAPLUS

L44 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2002:368286 HCAPLUS
 DN 136:374550
 TI A skin cream composition containing chitosan conjugates
 IN **Wadstein, Jan**
 PA Wadlund AS, Norway
 SO PCT Int. Appl., 27 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	WO 2002038123	A1	20020516	WO 2001-NO437	20011101
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	NO 310176	B1	20010605	NO 2000-5718	20001113
	AU 2002016473	A5	20020521	AU 2002-16473	20011101
	EP 1341517	A1	20030910	EP 2001-993455	20011101
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2004043963	A1	20040304	US 2003-416671	20030922
PRAI	NO 2000-5718	A	20001113		
	WO 2001-NO437	W	20011101		
AB	The present invention is related to compns. containing chitosan conjugated CLA (conjugated linoleic acid) and a chitosan conjugated Vitamin A or a β -cyclodextrin conjugated vitamin A. The invention also concerns the preparation of the compns. The compns. according to the invention can be used as topical and cosmetic compns. as well as pharmaceutical compns. for treatment of atypical dermatitis, psoriasis eczema as well as eczema of different origins and solar dermatitis.				
IT	60-33-3D, Linoleic acid, conjugates with chitosan				
	RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (skin cream composition containing chitosan conjugates)				
RN	60-33-3 HCAPLUS				
CN	9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)				

Double bond geometry as shown.



IT **2420-56-6**, 10,12-Octadecadienoic acid, (10E,12Z)-

2540-56-9, 9-cis-11-trans-Linoleic acid

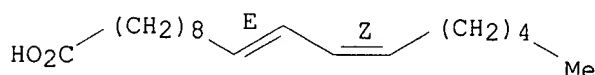
RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(skin cream composition containing chitosan **conjugates**)

RN 2420-56-6 HCAPLUS

CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

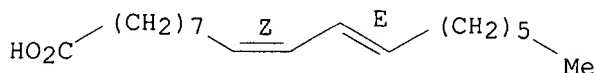
Double bond geometry as shown.



RN 2540-56-9 HCAPLUS

CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Collagen Corporation	1995			EP 0637450 A2	HCAPLUS
DCV Inc	1999			WO 9932105 A1	HCAPLUS
Leuba	1991			US 5057542 A	HCAPLUS
Natural Nutrition Ltd	1999			WO 9926588 A2	HCAPLUS
Roussell-Uclaf	1991			EP 0414608 A1	HCAPLUS
Thom, E	2001	19	51	J Appl Cosmetol	HCAPLUS
Unilever Nv	2000			WO 0037040 A1	HCAPLUS
Unilever Plc	2000			WO 0037039 A1	HCAPLUS
Unilever Plc	2001			WO 0108650 A1	HCAPLUS
Volden, G	1998			WO 9833476 A1	HCAPLUS
Wadlund As	2001			NO 310176 B1	HCAPLUS
Wadstein, J	1994			WO 9421225 A1	HCAPLUS
Wadstein, J	1999			WO 9949840 A1	HCAPLUS

L44 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:888071 HCAPLUS

DN 136:183105

TI **Conjugated linoleic acid** reduces body fat in healthy exercising humans

AU Thom, E.; **Wadstein, J.**; Gudmundsen, O.

CS Parexel Norway AS, Lillestrom, 2001, Norway

SO Journal of International Medical Research (2001), 29(5), 392-396

CODEN: JIMRBV; ISSN: 0300-0605

PB Cambridge Medical Publications Ltd.

DT Journal
 LA English
 AB This study was designed to investigate the efficacy and tolerability of daily **conjugated linoleic acid (CLA)** in healthy exercising humans. This was a randomized, double-blind, placebo-controlled study in 20 healthy humans of normal body weight and body mass index less than 25.0 kg/m², who did standardized phys. exercise in a gym for 90 min three times weekly. Participants took either placebo (hydrogel) or **CLA** 0.6 mg, three times daily, as two capsules during meals, for 12 wk. Body fat, measured using near IR light, was significantly reduced in the **CLA** group during the study, but not in the placebo group. No effects on body weight were observed Tolerability was good and similar in the two groups. Compliance, as judged by the number of returned capsules, was more than 80% of the recommended dose for all participants. Thus **CLA** reduces body fat but not body weight in healthy exercising humans of normal body weight

IT **121250-47-3, Conjugated linoleic acid**
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (conjugated linoleic acid reduces body fat in healthy exercising humans)

RN 121250-47-3 HCAPLUS
 CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4
 CMF C18 H36 O2

HO₂C-(CH₂)₁₆-Me

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Atkinson, R	1999	1	328	Advances in Conjugat	
Azain, M	2000	130	1548	J Nutr	HCAPLUS
Berven, G	2000	102	455	Eur J Lipid Sci Tech	HCAPLUS
Blankson, H	2000	130	2943	J Nutr	HCAPLUS
Cassady, S	1996	7	8	Cardiopulm Phys Ther	
Conway, J	1984	40	1123	Am J Clin Nutr	MEDLINE
Dugan, M	1997	77	723	Can J Anim Sci	HCAPLUS
Ferreira, M	1997	11	280	J Strength Cond Res	
Gavino, V	2000	130	27	J Nutr	HCAPLUS
Lowery, L	1998	30	S182	Med Sci Sports Exerc	
Ostrowska, E	1999	129	2037	J Nutr	HCAPLUS
Pariza, M	1996	96	A3227	Exp Biol	
Park, Y	1997	32	853	Lipids	HCAPLUS
Park, Y	1999	34	243	Lipids	HCAPLUS
Tsuboyama-Kasaoka, N	2000	49	1534S	Diabetes	
Vessby, B	1999	101	AT2	Chem Phys Lipids	
West, D	1998	275	R667	Am J Physiol	HCAPLUS
Zambell, K	2000	35	777	Lipids	HCAPLUS

L44 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:584837 HCAPLUS

DN 136:221495

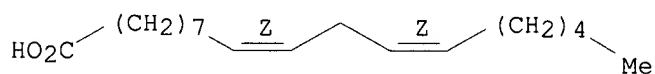
TI The effect of a new skin ointment on skin thickness and elasticity

AU Thom, E.; Gudmundsen, O.; **Wadstein, J.**
 CS Parexel Norway AS, Lillestrom, Norway
 SO Journal of Applied Cosmetology (2001), 19(2), 51-57
 CODEN: JACOEL; ISSN: 0392-8543
 PB International Ediemme
 DT Journal
 LA English
 AB The present open pilot study was carried out in order to investigate a new patented concept for skin treatment. The new concept is intended for use in treatment of ageing skin. The ointment contains **conjugated linoleic acid (CLA)** and retinyl palmitate (RP). Both ingredients are conjugated with the biopolymer chitosan in order to improve water solubility, increase skin penetration and inhibit oxidation

of the active substances. A number of studies have previously been carried out with conjugated retinyl palmitate, where the conjugation mostly has been done using β -cyclodextrin. We included 20 females in our study and the treatment period was three months. Objective measurements of skin-thickness and elasticity were carried out initially and after three months. Subjective observations and scores were performed by the participants themselves using visual analog scales (VASs) initially and at the end of the study. The results showed a significant improvement in skin quality both with regard to objective as well as in subjective parameters after treatment with the new ointment. In comparison to our previous studies with ointments containing only conjugated RP the effects on skin thickness and elasticity were more pronounced with the new formulation showing an average improvement in skin thickness of 51% and in skin elasticity of 27%. The self evaluation scores of the participants were also highly favorable and significant, and all of the participants would like to continue with the ointment after the formal study was closed. The tolerability of the treatment was excellent and all subjects concluded the study according to the protocol.

IT **60-33-3DP, Linoleic acid, conjugates**
 with chitosan
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (effect of new skin ointment on skin thickness and elasticity)
 RN 60-33-3 HCAPLUS
 CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



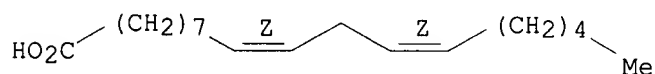
RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Counts, D	1988	39	235	J Soc Cosmet Chem	HCAPLUS
Fthenakis, C	1991	42	211	J Sos Cosmet Chem	
Kim, S	1999			Proceedings 23 World	
Pitterman, W			361	Chitin Handbook	
Thom, E	1993	11	71	J Appl Cosmetology	
Thom, E	1994	12	45	J Appl Cosmetology	
Thom, E	1997	15	133	J Appl Cosmetology	HCAPLUS

L44 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:906573 HCAPLUS
 DN 134:146896
 TI **Conjugated linoleic acid** reduces body fat mass in overweight and obese humans
 AU Blankson, Henrietta; Stakkestad, Jacob A.; Fagertun, Hans; Thom, Erling; Wadstein, Jan; Gudmundsen, Ola
 CS Scandinavian Clinical Research AS, Kjeller, N-2027, Norway
 SO Journal of Nutrition (2000), 130(12), 2943-2948
 CODEN: JONUAI; ISSN: 0022-3166
 PB American Society for Nutritional Sciences
 DT Journal
 LA English
 AB **Conjugated linoleic acid (CLA)** has been shown to reduce body fat mass (BFM) in animals. To investigate the dose-response relationships of **conjugated linoleic acid** with regard to BFM in humans, a randomized, double-blind study including 60 overweight or obese volunteers (body mass index 25-35 kg/m²) was performed. The subjects were divided into five groups receiving placebo (9 g olive oil), 1.7, 3.4, 5.1 or 6.8 g **conjugated linoleic acid** per day for 12 wk, resp. Dual-energy X-ray absorptiometry was used to measure body composition [measurements at wk 0 (baseline), 6 and 12]. Of the 60 subjects, 47 completed the study. Eight subjects withdrew from the study due to adverse events; however, no differences among treatment groups were found regarding adverse events. Repeated-measures anal. showed that a significantly higher reduction in BFM was found in the **conjugated linoleic acid** groups compared with the placebo group (P = 0.03). The reduction of body fat within the groups was significant for the 3.4 and 6.8 g **CLA** groups (P = 0.05 and P = 0.02, resp.). No significant differences among the groups were observed in lean body mass, body mass index, blood safety variables or blood lipids. The data suggest that **conjugated linoleic acid** may reduce BFM in humans and that no addnl. effect on BFM is achieved with doses > 3.4 g **CLA**/d.
 IT **60-33-3, Linoleic acid**, biological studies
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (**conjugated linoleic acid** effect on body fat mass in overweight and obese humans)
 RN 60-33-3 HCAPLUS
 CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Atkinson, R	1999	1	328	Advances in Conjugat	
Chin, S	1994	124	2344	J Nutr	HCAPLUS
Doyle, E	1998	9	69	INFORM	
Dugan, M	1997	77	723	Can J Anim Sci	HCAPLUS
Ha, Y	1990	50	1097	Cancer Res	HCAPLUS
Ip, C	1991	51	6118	Cancer Res	HCAPLUS
Kepler, C	1970	245	3612	J Biol Chem	HCAPLUS

Kepler, C	1971	246	2765	J Biol Chem	HCAPLUS
Lee, K	1994	108	19	Atherosclerosis	HCAPLUS
Nicolosi, R	1993	88	2458	Circulation (suppl)	
Pariza, M	1996	10	A3227	FASEB J	
Pariza, M	1997	11	A139	FASEB J	
Park, Y	1995		A64-10	IFT Annual Meeting	
Park, Y	1997	32	853	Lipids	HCAPLUS
Park, Y	1999	34	235	Lipids	HCAPLUS
Park, Y	1999	34	243	Lipids	HCAPLUS
Vessby, B	1999	101	AT2./	Chem Phys Lipids	
World Health Organizati	1997			Report of a WHO Cons	

L44 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:793054 HCAPLUS

TI Effects of **conjugated linoleic acid** (

CLA) on body fat mass in overweight or obese human volunteers: a double-blind, randomized placebo controlled study.

AU Blankson, Henrietta; Stakkestad, Jacob A.; Fagertun, Hans; Thom, Erling; Wadstein, Jan; Gudmundsen, Ola

CS Scandinavian Clinical Research AS, N-2027 Kjeller, Norway

SO Abstracts of Papers, 220th ACS National Meeting, Washington, DC, United States, August 20-24, 2000 (2000) AGFD-023
CODEN: 69FZC3

PB American Chemical Society

DT Journal; Meeting Abstract

LA English

AB **CLA** is in widespread use in Norway, Sweden, and USA as a nutritional supplement. However, no controlled clin. trial has previously been performed assessing the efficiency of the product. The main objective of the study was to investigate the effect of different daily doses of **CLA** on body composition in healthy volunteers. We especially wanted to study if **CLA** could reduce body fat mass and increase lean body mass. The trial was designed as a randomized, double-blind study including 60 overweight or obese volunteers (body mass index (BMI) above 25 kg/m² and less than 35 kg/m²). The subjects were divided into five groups receiving placebo (9g olive oil), 1.7g, 3.4g, 5.1g or 6.8g **CLA** per day for 12 wk, resp., by a simple block randomization procedure. Dual-Energy X-ray Absorptiometry (DXA) was used to measure body composition (measurements at week 0, week 6 and week 12). ANOVA showed that a significantly higher reduction in body fat mass was found in the **CLA** groups compared with the placebo group (p=0.03). The reduction of body fat within the groups was significant for the 3.4g and 6.8g **CLA** groups (p=0.05 and p=0.02, resp.). Only the highest dose of **CLA** (6.8g) gave a significant increase in lean body mass (p=0.03). The four **CLA** groups exhibited an increase in lean body mass from week 0 to week 12; however, no statistically significant difference was observed between the groups. After 12 wk of treatment no significant changes in weight or body mass index (BMI) were seen in any group. No difference was found between the groups regarding safety laboratory parameters or blood lipids.

The frequency of adverse events during the trial was relatively high (60%), but no difference was found between the treatment groups. The data suggest that **CLA** may reduce body fat mass in humans. The dose-response relationship in the present study indicates that no addnl. effect on body fat mass is achieved with doses above 3.4g **CLA** per day.

L44 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:613544 HCAPLUS

DN 133:309388

TI Safety of **conjugated linoleic acid** (**CLA**) in overweight or obese human volunteers

AU Berven, Grethe; Bye, Amund; Hals, Ottar; Blankson, Henrietta; Fagertun, Hans; Thom, Erling; **Wadstein, Jan**; Gudmundsen, Ola

CS Scandinavian Clinical Research, Kjeller, N-2027, Norway

SO European Journal of Lipid Science and Technology (2000), 102(7), 455-462
CODEN: EJLTFM; ISSN: 1438-7697

PB Wiley-VCH Verlag GmbH

DT Journal

LA English

AB The main objective of the study was to investigate the safety of **conjugated linoleic acid (CLA)** in healthy volunteers. The safety and effects of **CLA** on body composition were investigated in 60 overweight or obese humans with body mass index (BMI) 27.5-39.0 kg/m². They were divided into 2 groups given 3.4 g **CLA** or placebo (4.5 g olive oil) daily for 12 wk. The safety was evaluated by anal. of blood hematol. and biochem. parameters and by clin. exams. at baseline and week 12. Vital signs and adverse events were checked at baseline and weeks 6 and week 12. Bio-Impedance Assessment was used for body composition measurements. Adverse events occurred in 10% subjects. No differences in adverse events or other safety parameters were found between the 2 treatment groups. Small changes in the biochem. safety data were not regarded as clin. significant. No clin. significant changes in vital signs were observed. In the **CLA** group, the mean body weight decreased by 1.1 kg, while the mean BMI decreased by 0.4 kg/m². The overall treatment effect of **CLA** on body weight and BMI was not significant. There were no differences between the groups with regard to **CLA** efficacy parameters. Thus, **CLA** in the used dose is a safe substance in healthy humans with regard to the safety parameters investigated.

IT **121250-47-3, Conjugated linoleic acid**
RL: ADV (Adverse effect, including toxicity); FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(dietary **conjugated linoleic acid** safety and effects on blood parameters and body weight in overweight or obese humans)

RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO₂C-(CH₂)₁₆-Me

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Aitken, R	1966	62	989	Proc R Soc Med	
Atkinson, R	1999	1	348	Advances in conjugat	HCAPLUS
Bell, N	1998	52	856	Eur J Clin Nutr	MEDLINE
Belury, M	1997	32	199	Lipids	HCAPLUS
Belury, M	1997	1	58	Nutr Dis Update J	
Belury, M	1995	53	83	Nutr Rev	MEDLINE
Cook, M	1993	72	1301	Poult Sci	HCAPLUS
Doyle, E	1998	9	69	Inform	

Dugan, M	1997	77	723	Can J Anim Sci	HCAPLUS
Ferreira, M	1997	11	280	J Strength Condition	
Fritsche, J	1998	206	77	Z Lebensm Unters For	HCAPLUS
Ha, Y	1990	50	1097	Cancer Res	HCAPLUS
Ha, Y	1987	8	1881	Carcinogenesis	HCAPLUS
Ip, C	1994	54	1212	Cancer Res	HCAPLUS
Knekt, P	1996	73	687	Br J Cancer	MEDLINE
Lee, K	1994	108	19	Atherosclerosis	HCAPLUS
Liew, C	1995	16	3037	Carcinogenesis	HCAPLUS
Liu, K	1998	127	15	Cancer Lett	HCAPLUS
Lowery, L	1998	30	182	Med Sci Sports Exerc	
Miller, C	1994	198	1107	Biochem Biophys Res	HCAPLUS
Munday, J	1999	81	251	Br J Nutr	HCAPLUS
Nicolosi, R	1997	22	266	Artery	HCAPLUS
Park, Y	1997	32	853	Lipids	HCAPLUS
Scimeca, J	1998	36	391	Food Chem Toxicol	HCAPLUS
Sugano, M	1998	33	521	Lipids	HCAPLUS
Vessby, B	1999	101		Chem Phys Lipids	
West, D	1998	44	R667	Am J Physiol	

L44 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:201065 HCAPLUS

DN 132:207242

TI Bulk animal feeds containing **conjugated linoleic acid**

IN Remmereit, Jan

PA Natural Nutrition Ltd., Norway

SO U.S., 9 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	----	-----	-----
PI	US 6042869	A	20000328	US 1998-27075	19980220
	US 6203843	B1	20010320	US 2000-506128	20000217
	US 2001026832	A1	20011004	US 2000-742995	20001220
	US 6344230	B2	20020205		
	US 2002090443	A1	20020711	US 2001-36059	20011019
	US 6432469	B1	20020813		
PRAI	US 1998-27075	A1	19980220		
	US 2000-506128	A1	20000217		
	US 2000-742995	A1	20001220		

AB A **conjugated linoleic acid (CLA)**

is prepared on industrial scale as a hydrolyzed isomerized product for blending into bulk domestic animal feeds. The **CLA**-containing isomerized hydrolyzed oil from sunflower and safflower seeds has sufficiently low levels of phosphatides and sterols to permit crude processing and incorporation into feeds of an undried, undistd. oil fraction without toxic or unpalatable effects.

IT 544-70-7, 9,11-Octadecadienoic **acid** (9Z,11Z)-

544-71-8, 9,11-Octadecadienoic **acid** (9E,11E)-

872-23-1, 9,11-Octadecadienoic **acid** (9E,11Z)-

1072-36-2, 10,12-Octadecadienoic **acid** (10E,12E)-

2420-44-2, 10,12-Octadecadienoic **acid** (10Z,12E)-

2420-56-6, 10,12-Octadecadienoic **acid** (10E,12Z)-

2540-56-9, 9,11-Octadecadienoic **acid** (9Z,11E)-

7307-45-1, 10,12-Octadecadienoic **acid** (10Z,12Z)-

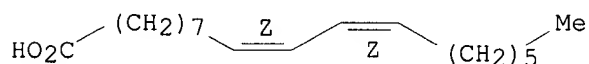
RL: AGR (Agricultural use); BOC (Biological occurrence); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study);

OCCU (Occurrence); USES (Uses)
 (bulk animal feeds containing **conjugated linoleic acid**)

RN 544-70-7 HCAPLUS

CN 9,11-Octadecadienoic acid, (9Z,11Z)- (9CI) (CA INDEX NAME)

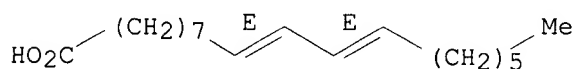
Double bond geometry as shown.



RN 544-71-8 HCAPLUS

CN 9,11-Octadecadienoic acid, (9E,11E)- (9CI) (CA INDEX NAME)

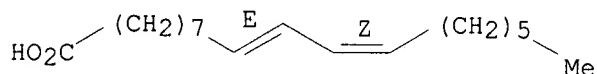
Double bond geometry as shown.



RN 872-23-1 HCAPLUS

CN 9,11-Octadecadienoic acid, (9E,11Z)- (9CI) (CA INDEX NAME)

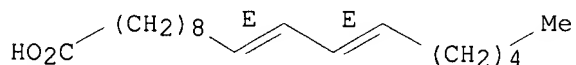
Double bond geometry as shown.



RN 1072-36-2 HCAPLUS

CN 10,12-Octadecadienoic acid, (10E,12E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 2420-44-2 HCAPLUS

CN 10,12-Octadecadienoic acid, (10Z,12E)- (9CI) (CA INDEX NAME)

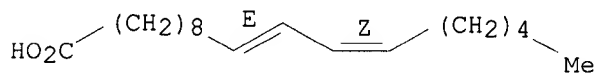
Double bond geometry as shown.



RN 2420-56-6 HCAPLUS

CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

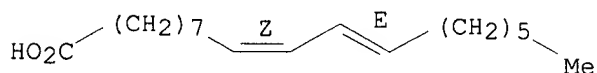
Double bond geometry as shown.



RN 2540-56-9 HCAPLUS

CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

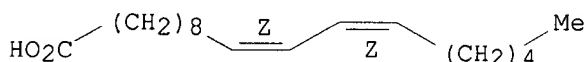
Double bond geometry as shown.



RN 7307-45-1 HCAPLUS

CN 10,12-Octadecadienoic acid, (10Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



IT 60-33-3D, Linoleic acid, conjugated

derivs.

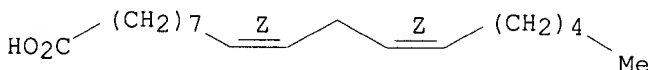
RL: AGR (Agricultural use); FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(bulk animal feeds containing **conjugated linoleic acid**)

RN 60-33-3 HCAPLUS

CN 9,12-Octadecadienoic acid (9Z,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
=====	=====	=====	=====	=====	=====
Anon	1994			GB 558881	HCAPLUS
Baltes	1964			US 3162658	
Belury, M	1995	53	83	Nut Rev	
Braae, B	1976	53	353	JAACS	HCAPLUS
Bradley	1944			US 2350583	HCAPLUS
Bradley, T	1942	34	237	Ind Eng Chem	
Brady	1987			US 4678580	HCAPLUS
Burkhardt, H	1970	47	69	JAACS	HCAPLUS
Burkhardt, H	1971	48	697	JAACS	HCAPLUS
Burr	1941			US 2242230	HCAPLUS
Chin, S	1992	5	185	J Food Comp Anal	HCAPLUS
Christie, W	1997	74	1231	JAACS	
Clement, I	1997	66	1523S	Am J Clin Nutr	
Cook	1995			US 5428072	HCAPLUS
Cook	1995			US 5430066	HCAPLUS
Cook	1996			US 5554646	HCAPLUS
Cook	1996			US 5585400	HCAPLUS
Cook	1997			US 5674901	HCAPLUS
Cook	1998			US 5725873	HCAPLUS
Cowan, J	1950		492	JOACS	HCAPLUS
Emken	1973			US 3729379	HCAPLUS

Ensminger, M	1990	507	394	Feeds & Nutrition Di	
Holman, R	1991	88	4830	PNAS	HCAPLUS
Howell	1994			US 5286399	HCAPLUS
Itoh, T	1973	50	122	JAACS	HCAPLUS
Jie, L	1997	32	1019	Lipids	
Jie, L	1997	32	1041	Lipids	
Krajca	1979			US 4164505	HCAPLUS
Lawate	1998			US 5773391	HCAPLUS
Mauter	1972			US 3650677	HCAPLUS
Mehta	1979			US 4179454	HCAPLUS
Pariza	1991			US 5017614	HCAPLUS
Pariza	1991			US 5070104	HCAPLUS
Pariza	1993			US 5208356	HCAPLUS
Park, Y	1997	32	853	Lipids	HCAPLUS
Radlove, S	1946	38	997	Ind Eng Chem	
Rathjen	1966			US 3278567	HCAPLUS
Sebedio, J	1997	1345	5	Biochem Biophys Acta	HCAPLUS
Sebedio, J	1988	65	362	JAACS	HCAPLUS
Sehat, N	1998	33	217	Lipids	HCAPLUS
Smiles, A	1988	65	1151	JAACS	HCAPLUS
Struve	1983			US 4381264	HCAPLUS
Willett, W	1994	84	722	Am J Public Health	MEDLINE

L44 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1999:355711 HCAPLUS

DN 131:23254

TI **Conjugated linoleic acid** delivery system in
cosmetic preparationsIN **Remmereit, Jan**PA **Natural Nutrition Ltd. A/S, Norway**

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9926588	A2	19990603	WO 1998-IB1998	19981120
	WO 9926588	A3	19990722		
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 6019990	A	20000201	US 1997-975748	19971121
	JP 11209279	A2	19990803	JP 1998-550	19980105
	JP 2002234838	A2	20020823	JP 2002-35933	19980105
	CA 2229624	C	20020709	CA 1998-2229624	19980213
	CA 2229624	AA	19990705		
	US 6034132	A	20000307	US 1998-44289	19980319
	AU 9913478	A1	19990615	AU 1999-13478	19981120
	EP 1032363	A2	20000906	EP 1998-957060	19981120
	EP 1032363	B1	20030205		
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	AT 232084	E	20030215	AT 1998-957060	19981120
	ES 2191979	T3	20030916	ES 1998-957060	19981120

JP 2004339240 A2 20041202 JP 2004-256354 20040902
 PRAI US 1997-975748 A 19971121
 JP 1998-550 A3 19980105
 JP 2002-35933 A3 19980105
 WO 1998-IB1998 W 19981120

AB The invention provides new cosmetic formulations containing free and derivatized forms of **conjugated linoleic acid**. These ingredients have beneficial effects related to their medicinal and nutritional properties, but are also engineered for their compatibility with standard cosmetic ingredients. Certain vitamin/**conjugated linoleic acid** combinational mols. are described which deliver equimolar amts. of both free components to viable layers of the epidermis, thereby obtaining multiple functionality of the final product. A sunscreen lotion contained capric/caprylic triglyceride 12, mineral oil 66, PEG dilaurate 6, **conjugated linoleic acid** (70 %) 11, linoleyl linoleate 3, retinoyl ascorbate 1, stearyl PABA 0.5, and titania 0.5 %.

IT 2420-56-6 2540-56-9 121250-47-3,

Conjugated linoleic acid

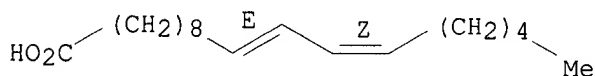
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(**conjugated linoleic acid** delivery system in cosmetic preps.)

RN 2420-56-6 HCAPLUS

CN 10,12-Octadecadienoic acid, (10E,12Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 2540-56-9 HCAPLUS

CN 9,11-Octadecadienoic acid, (9Z,11E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 121250-47-3 HCAPLUS

CN Octadecadienoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 57-11-4

CMF C18 H36 O2

HO₂C-(CH₂)₁₆-Me

=> => fil wpix

FILE 'WPIX' ENTERED AT 10:59:29 ON 27 JAN 2006

COPYRIGHT (C) 2006 THE THOMSON CORPORATION

FILE LAST UPDATED: 24 JAN 2006 <20060124/UP>
 MOST RECENT DERWENT UPDATE: 200606 <200606/DW>
 DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
 PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
<http://scientific.thomson.com/support/patents/coverage/latestupdates/>

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER
 GUIDES, PLEASE VISIT:
<http://scientific.thomson.com/support/products/dwpi/>

>>> FAST-ALERTING ACCESS TO NEWLY-PUBLISHED PATENT
 DOCUMENTATION NOW AVAILABLE IN DERWENT WORLD PATENTS INDEX
 FIRST VIEW - FILE WPIFV.
 FOR FURTHER DETAILS:
<http://scientific.thomson.com/support/products/dwpifv/>

>>> THE CPI AND EPI MANUAL CODES WILL BE REVISED FROM UPDATE 200601.
 PLEASE CHECK:
<http://scientific.thomson.com/support/patents/dwpieref/reftools/classification>

>>> PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE
http://www.stn-international.de/stndatabases/details/ipc_reform.html and
<http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf> <<<
 'BI ABEX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE

=> d all abeq tech abex tot

L99 ANSWER 1 OF 3 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

AN 1997-311109 [29] WPIX

DNC C1997-100148

TI Health-care, diet, nutrient food production.

DC D13

IN JIN, L; WANG, J; ZHONG, Y

PA (BEIJ-N) BEIJING NUTRIENT SOURCES INST

CYC 1

PI CN 1104450 A 19950705 (199729)* A23L001-29 <--

ADT CN 1104450 A CN 1994-106338 19940613

PRAI CN 1994-106338 19940613

IC ICM A23L001-29

ICS A23L001-10; A23L001-308; A61K035-78

AB CN 1104450 A UPAB: 19970716

A health-care, nutrient food for dieting solves the contradictive problem of diet food of having an obvious effect on reducing the fat, but poor effect on health. The proposed diet food comprises natural edible substances of natural edible fibers (about 20%), vegetable protein (15-19%) and vegetable fat (4-10%), unsaturated fatty acids such as oleic acid and linoleate, at ratio of 70-80%, and also includes triterpene, flavone, polysaccharides, physiological active substances and some normal or trace elements such as zinc and selenium. The food is suitable for reducing fat and **blood pressure**. This product can reduce the fat while being nutrient.

FS CPI

FA AB

MC CPI: D03-H01T2

L99 ANSWER 2 OF 3 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 AN **1988-087068** [13] WPIX
 DNC C1988-038944
 TI Edible fat compsn. containing linoleic and linolenic acids - used for preventing allergosis, thrombosis and **hypertension**.
 DC B05 D13
 PA (OKUY-I) OKUYAMA H
 CYC 1
 PI JP 63036744 A 19880217 (198813)* 6 <--
 ADT JP 63036744 A **JP 1986-179608 19860730**
 PRAI **JP 1986-179608 19860730**
 IC A61K031-20
 AB JP 63036744 A UPAB: 19930923
 An edible oil and fat compsn. having activity for preventing allergosis and thrombosis **hypertension** comprises at least 20 weight % of alpha-linolenic acid and the weight ratio of alpha-linolenic acid and linoleic acid of at least 1.
 Pref. content of alpha-linolenic acid in the oil and fat compsn. is at least 20 weight (pref. 30) weight %. The weight ratio of alpha-linolenic acid and linoleic acid is at least 1 (at least 3).
 USE/ADVANTAGE - The compsn. prevents allergosis, thrombosis and **hypertension**.
 0/0
 FS CPI
 FA AB; DCN
 MC CPI: B04-B01B; B04-B01C; B10-C04E; B12-D02; B12-F05; B12-H02; D03-C

L99 ANSWER 3 OF 3 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
 AN **1986-294982** [45] WPIX
 DNC C1986-127860
 TI Egg, meat or milk containing biologically active cpd. - obtd. from or domestic animal after giving it feed containing gamma linoleic acid.
 DC C03 D13
 PA (AGEN) AGENCY OF IND SCI & TECHNOLOGY; (KANF) KANEGAFUCHI CHEM KK; (NOSA) NIPPON NOSAN KOGYO KK
 CYC 1
 PI JP 61216658 A 19860926 (198645)* 4 <--
 ADT JP 61216658 A **JP 1985-54298 19850320**
 PRAI **JP 1985-54298 19850320**
 IC A23C009-15; A23L001-30
 AB JP 61216658 A UPAB: 19930922
 Egg, meat or milk containing a biologically active cpd, obtd. from a fowl or domestic animal after giving it a feed containing gamma linoleic acid (I), is claimed.
 ADVANTAGE - As the egg, meat or milk contains (I), it prevents the **high blood pressure** or getting fatty to eat it.
 0/0
 FS CPI
 FA AB
 MC CPI: C04-B04A3; C04-B04K; C04-B04M; C12-F05; D03-H01T

=> => d his

(FILE 'HOME' ENTERED AT 09:28:10 ON 27 JAN 2006)
 SET COST OFF

jan delaval - 27 january 2006

FILE 'HCAPLUS' ENTERED AT 09:28:25 ON 27 JAN 2006

L1 E WADSTEIN/AU
17 S E4,E5
E REMMEREIT/AU
L2 6 S E4
E NATURAL/CS,PA
E NATURAL NUT/CS,PA
L3 2 S E9-E16
E NAT NUT/PA,CS
E US99-410484/AP,PRN
E US98-104032/AP,PRN
L4 22 S L1-L3
SEL RN 17

FILE 'REGISTRY' ENTERED AT 09:37:39 ON 27 JAN 2006

L5 32 S E1-E32
L6 3 S L5 AND C18H32O2
L7 2 S L6 NOT IDS/CI
L8 1 S L6 NOT L7
L9 1 S 60-33-3
E C18H32O2/MF
L10 193 S E3 AND OCTADECADIENOIC ACID
L11 9 S L10 AND 9 12
L12 5 S L11 NOT LABELED
L13 5 S L9,L12
E C18H36O2/MF
L14 4 S L10 AND CONJUGAT?
L15 1 S 57-11-4/CRN AND CONJUGAT?
L16 4 S L8,L14,L15
L17 5 S 544-71-8 OR 544-70-7 OR 2540-56-9 OR 872-23-1 OR 1839-11-8
L18 7 S L10 AND 9 11
L19 2 S L18 NOT L17
L20 1 S L19 AND L16
L21 4 S L16,L20
L22 1 S L19 NOT L20
L23 6 S L17,L22 AND L18
L24 4 S 2420-44-2 OR 1072-36-2 OR 7307-45-1 OR 2420-56-6
L25 7 S L10 AND 10 12
L26 7 S L24,L25
L27 2 S L26 AND L21
L28 4 S L21,L27
L29 5 S L26 NOT L28
L30 4 S L28 AND L5-L29
L31 5 S L13 AND L5-L30
L32 4 S L23 AND L5-L31 NOT L30
L33 5 S L29 AND L5-L32
L34 5 S L10 AND 9 AND 12 NOT L31
L35 3 S L10 AND 9 AND 11 NOT L32
L36 2 S L10 AND 10 AND 12 NOT L33
L37 4 S L30,L35,L36

FILE 'HCAPLUS' ENTERED AT 09:58:21 ON 27 JAN 2006

L38 1927 S L37
L39 35234 S L31
L40 357 S L32
L41 263 S L33
L42 2754 S ?CONJUGAT?(S)LINOLEIC(S)ACID
L43 3059 S CLA
L44 11 S L4 AND L38-L43
E HYPERTENSION/CT

L45 47447 S E3-E27
 E E3+ALL
 L46 47447 S E4+NT
 L47 76930 S E4/BI OR E5/BI OR E6/BI
 E E9+ALL
 L48 41564 S E3+NT
 L49 100028 S E3/BI
 E E10+ALL
 L50 5939 S E4+NT
 L51 17094 S E4/BI OR E5/BI OR E6/BI
 E E8+ALL
 E E9+ALL
 E E8+ALL
 L52 27819 S E4
 L53 35595 S E5/BI
 L54 449 S L38-L43 AND L45-L53
 L55 16 S L54 AND L38
 L56 37 S L54 AND L42,L43
 L57 1 S L54 AND L40 AND L41
 L58 37 S L55,L56 NOT L57
 SEL AN 1 3 5-7 9-18 20-23 25 26 28-31
 L59 25 S L58 AND E1-E49
 L60 12 S L58 NOT L59
 L61 154 S L40 AND L41
 L62 976 S L8
 L63 12 S L61,L62 AND L45-L53
 L64 3 S L63 NOT L59
 L65 9 S L59 AND L63
 L66 25 S L59,L65
 SEL HIT RN

FILE 'REGISTRY' ENTERED AT 10:18:38 ON 27 JAN 2006

L67 5 S E50-E54
 L68 5 S L67 AND L31,L32,L33,L37

FILE 'REGISTRY' ENTERED AT 10:19:11 ON 27 JAN 2006

FILE 'HCAPLUS' ENTERED AT 10:19:20 ON 27 JAN 2006

FILE 'WPIX' ENTERED AT 10:20:22 ON 27 JAN 2006

L69 482 S L42/BIX
 L70 506 S L43/BIX
 E A61K031-200/IC,ICM,ICS
 L71 775 S E3-E15
 L72 280 S E6-E10
 E A61K031-200/ICA,ICI
 L73 9 S E5-E8
 E A61K031:200/ICI
 L74 18 S E4,E5
 E CONJUGATED LINOLEIC ACID/CN
 L75 1 S E6
 L76 1 S E5
 E 9,11-LINOLEIC/CN
 L77 1 S E4-E5
 L78 2 S E6,E7
 E 10,12-LINOLEIC/CN
 E 10,12-OCTADECA/CN
 L79 1 S E2
 L80 6 S L75-L79
 SEL DCSE

```

      EDIT /DCSE /DCRE
L81      896 S E1-E6
      SEL SDCN L80
      EDIT E7-E13 /SDCN /DCN
L82      1259 S E7-E13
L83      1972 S 0206/DRN
L84      3282 S L69-L74,L81-L83
L85      4 S L84 AND (B14-F02A OR C14-F02A OR B12-F04 OR C12-F04)/MC
L86      4 S L84 AND P525/M0,M1,M2,M3,M4,M5,M6
L87      38 S L84 AND A61P009-12/IC,ICM,ICS,ICA,ICI
L88      0 S L84 AND A61P009:12/ICI
L89      43 S L85-L88
L90      0 S L89 AND (WADSTEIN ? OR REMMEREIT ?)/AU
L91      4 S L89 AND PY<=1998
L92      9 S L89 AND PRY<=1998
L93      9 S L89 AND AY<=1998
L94      118 S L84 AND (L47 OR L49 OR L51 OR L53)
L95      136 S L84 AND (HYPERTENS? OR BLOOD(S)PRESSURE OR HYPOTENS? OR ANTIH
L96      104 S L94,L95 NOT L89
L97      30 S L96 AND (PY<=1998 OR PRY<=1998 OR AY<=1998)
L98      39 S L91-L93,L97
      SEL AN 20 38 39
L99      3 S L98 AND E14-E16

```

FILE 'WPIX' ENTERED AT 10:59:29 ON 27 JAN 2006

FILE 'MEDLINE' ENTERED AT 10:59:54 ON 27 JAN 2006

```

      E CONJUGATED/CT
      E E10+ALL
      E E2+ALL
L100      431 S E12+NT
L101      2030 S L42 OR L43
L102      2030 S L100,L101
      E HYPERTENSION/CT
      E E3+ALL
L103      158192 S E4+NT
      E E17+ALL
L104      32292 S E6
      E BLOOD PRESSURE/CT
      E E3+ALL
L105      185079 S E6+NT
      E E21+ALL
L106      16771 S E4+NT
L107      17 S L102 AND L103-L106
L108      8 S L107 AND PY<=1998

```

FILE 'EMBASE' ENTERED AT 11:02:54 ON 27 JAN 2006

```

      E CONJUGATED/CT
L109      277 S E118+NT OR E118-E127
L110      129 S E128-E147
L111      278 S L109,L110
L112      824 S L42
L113      152 S L111,L112 AND PY<=1998
      E HYPERTENSION/CT
L114      0 S L113 AND E3+NT
      E BLOOD PRESSURE/CT
L115      0 S L113 AND E3+NT
L116      0 S L113 AND (?HYPERTENS? OR BLOOD(S)PRESSUR?)

```

=>